

PROCEEDINGS

OF THE

ASIATIC SOCIETY OF BENGAL.

FOR MARCH, 1881.

The Monthly General Meeting of the Asiatic Society of Bengal was held on Wednesday, the 2nd March, 1881, at 9 P. M.

C. H. TAWNEY, Esq., M. A., Vice-President, in the Chair.

The minutes of the last Meeting were read and confirmed.

The following presentations were announced—

1. From the Marine Survey Department,—A List of Light-Houses and Light-Vessels in British India, by R. C. Carrington.

2. From the K. B. Akademie der Wissenschaften zu München,—(1) *Das Haus Wittelsbach und seine Bedeutung in der deutschen Geschichte*, by J. v. Döllinger, (2) *Ueber den geologischen Bau der libyschen Wüste*, by Dr. K. A. Zittel, (3) *Die Pflege der Geschichte durch die Wittelsbacher*, by Dr. L. Rockinger.

3. From the Palæographical Society,—Facsimiles of Ancient MSS., Oriental Series, Part V, by W. Wright.

4. From the Surveyor General of India,—(1) Account of the Operations of the Great Trigonometrical Survey of India, Vol. VI, (2) Synopsis of the Results of the Operations of the Great Trigonometrical Survey of India, Vol. VII.

5. From the authors,—(1) Report on the Electric Light at the East Indian Railway Company's Station, Howrah (Calcutta), by L. Schwendler, (2) Sketch of the Hindustani Language, by C. J. Lyall.

6. From the Home, Revenue and Agricultural Department,—the Sacred Books of the East, Vols. VI and IX, edited by F. Max Müller.

7. From Mr. Holgnette,—one silver and one copper coin.

8. From Dr. A. F. R. Hoernle,—18 Nos. of the *Deutsche Literatur Zeitung*.

The following Gentlemen, duly proposed and seconded at the last meeting, were balloted for and elected Ordinary Members :

- 1 Sir Ashley Eden, K. C. S. I. Lieut.-Governor of Bengal (re-election.)
- H. J. Reynolds, Esq., C. S.
- L. King, Esq.
- F. C. Channing, Esq.
- E. R. Shopland, Esq.
- Captain L. A. C. Cook.
- Babu Hem Chunder Gossain.
- W. C. Benett, Esq., C. S.
- Babu Troylokyanath Mitra, B. L.
- Babu Bhyrub Chunder Chatterji.
- J. Bridges Lee, Esq., M. A., F. G. S., F. Z. S., F. C. S.
- Babu Peary Mohun Guha, B. L.
- Babu Sreenath Chunder.

The COUNCIL reported that Mr. V. Ball had been appointed Member of Council under Rules 4 and 46 (as amended during the past year), and that he would officiate as Natural History Secretary during Mr. Wood-Mason's absence from Calcutta.

The SECRETARY reported that the following coins had been acquired under the Treasure Trove Act.

1. Four gold and eight silver coins found at Nya Doomka, Santhal Pergunnahs.
2. Six silver coins from Basti.

The SECRETARY read a letter from Lieut.-Col. J. W. H. Johnstone, dated, February 15th, 1881, regarding the supposed identity of the Awans resident in the Salt Range with the Jods of Baber.

"General Cunningham in his Archæological Report on the North-West Panjab wishes to identify the Awans resident in the Salt Range as the Jods of Baber. In fact a tribe of Jods is still located in this part of the country where Baber found them. This tribe is known to be a branch of the Janjúás, and there is no difficulty on the subject of the Jods, except that we now find the possessions of the Jods and Janjúás with the Awans. I have known this for some years, and am sorry I did not before communicate it to the Society. The explanation I would give of the Awans' possession of the country is this. They were resident on both the branches of the Indus below the Salt Range. Baber found the present country of the Marwats in the Bannú district occupied by Isákhlí Níázís. Subsequently

a wave of irruption took place from the hills. The Isákhil Niázis were displaced by the present Marwatís. The former ejected the Awans from Isákhil and Mianvali and drove them into the hills compelling them in turn to expel the Jods and Janjúás. The head man of Kálábágh is still Mullah Múzaffar Khán, the Chief of the Awans."

The following papers were read—

1. *A short note on the Shrines of Sitákund in Chittagong.*—By ADHAR LÁL SEN, Deputy Collector of Jessore, lately of Chittagong.

(Abstract)

After describing the geographical situation of Sitá Khund, the author of this paper, explains the derivation of its name "from a hot spring consecrated to Sitá, the deified heroine of the Ramáyana," and relates the various traditions regarding the disappearance of the hot spring which no longer exists in that locality. It is said to have been filled up in consequence of a dispute between the followers of Vishnu and Siva. An attempt was made by the present Mahant of the place to again open up the spring, but without success; and it is supposed that there never really was any hot spring in that locality, on account of its being "devoid of all trace of bitumen, which is invariably discovered in the adjacent hot springs." The author then proceeds to quote large extracts from various Puránas, relating the connection of Ráma and Sitá with the Sitákhund, and shows the untrustworthiness of these Puránic relations by comparing them with the accounts in Valmiki's Ramáyana according to which Ráma and Sitá can never have been in the regions where the Sitákhund is situated. Finally the author traces the pilgrim's journey as he passes from one shrine to another, giving various interesting details of each locality.

Mr. Bull remarked that though it may be true that there never was a hot spring in the locality mentioned, the absence of any trace of bitumen was no proof of its non-existence.

Extracts from this paper will be published in the Journal, Part I.

2. *A list of Earthquakes recorded in Assam during the year 1880. Communicated by the Meteorological Reporter to the Government of Bengal.*

The list will appear in the Journal, Part II.

3. *On the coins of Charibael, king of the Homerites and Sabæans.*—By MAJOR W. F. PRIDEAUX, F. R. G. S., Bombay Staff Corps.

(Abstract.)

This paper gives a description of two Himyaritic coins, which were received by the author from Aden in 1880, and attributed by him to Chari-

bael, who is mentioned in the twenty-third chapter of the *Periplus of the Erythræan Sea* as the paramount Sovereign of the contiguous tribes of the Homerites and Sabæans, and as having been on terms of friendly alliance with the Roman Emperors. This monarch was probably identical with the Himyaritic king *Kariba-él Wattâr Yehan'am*, whose name appears on three of the inscriptions discovered by M. Arnaud in the neighbourhood of Mârib in 1843, as well as on the coins exhibited to the meeting. The paper concludes with a short sketch of the Himyaritic monetary system, which may be classified into three divisions, (1) the thick imitations of the Athenian drachma, (2) the thin imitations of the late Athenian tetradrachma, and (3) the indigenous mintage with two heads, one on the obverse and one on the reverse of the coin (of which, in addition to the coins of Charibael, a few specimens were exhibited to the meeting). This last was probably the precursor of the rare Axumite series in gold, which appears to have remained current until the introduction of Islâm into South Arabia.

This paper will be published in the Journal, Part I, with a Plate.

4. *Comparative Table of the conjugations of the verbs substantive in Eastern Hindî.*—By G. A. GRIERSON, C. S.

5. *On a New Find of Early Muhammadan Coins of Bengal.*—By DR. A. F. R. HOERNLE.

(Abstract.)

This paper describes 14 early Muhammadan Coins of Bengal, found in November 1880 near Gauhati in Assam. They consist of 4 coins of Shams-ud-dîn Altamsh, 2 of Jalâlat-ud-dîn (Rizîyah), 1 of 'Alâ-ud-dîn Mas'aûd Shâh and 3 of Nâsir-ud-dîn Mahmûd Shâh, all Emperors of Dehli; also 1 coin of Ghiyâz-ud-dîn Iwaz and 3 of Mughîs-ud-dîn Yûzbak, both independent Sultâns of Bengal. Among these the coin of 'Alâ-ud-dîn Mas'aûd Shâh appears to be unique, being an exact counterpart (barring, of course, the ruler's name) of the coin of Nâsir-ud-dîn, No. 60, in Thomas' *Chronicles of the Pathân Kings of Dehli*, p. 81. It is further important as showing that the last mentioned coin should be ascribed to the younger Nâsir-ud-dîn rather than the elder. The coins of Mughîs-ud-dîn appear to be new. They are also important inasmuch as they help to determine the period of that Sultân's independence, which seems to have lasted only about three years from A. H. 652—655.

This paper will be published in the Journal, Part I, with three Plates.

Mr. Gibbs said that the paper a part of which had just been read was an interesting one; he had been for some years engaged in collecting Pathân and Moghul coins, and had procured many curious and rare speci-

mens. He hoped to be able to draw up a paper from the MS. on the new coins of the Pathán kings which had been found since Mr. Thomas' book was published. He might mention two very curious ones: (1) a gold of king No 9, Násir-ud-dín Mahinúd, and (2) a gold of king No. 17, Násir-ud-dín Khusban. The former shows Thomas' remark on page 134 that Ghíáz-ud-dín Balban was the first king that struck gold coins is incorrect. This gold coin is now in the Imperial Academy at Berlin. Mr. Gibbs having exchanged it for some rare Moghul coins with the late Col. Guthrie some years ago, before he collected the Pathán series. With regard to the latter king only one silver coin is known. It is in this Society's collection, but the gold one which he obtained through a Marwari in Bombay is of much finer execution than the silver coin.

Mr. Gibbs's experience leads him to the opinion that gold and silver coins will be found of all the Pathán kings; it was the custom to coin such for distribution when the monarch was first placed on the throne, and it will be found that even now not more than 12 out of the first 30 Pathán kings are without specimens of either large gold or silver coins, often of both. Mr. Gibbs also further noticed that the series of coins of the smaller Muhammadan kingdoms set up after Muhammad bin Tughlaq were curious and worth collecting. He had had the good fortune during the famine in Bombay to get a good many specimens of the Bahmani, Malwah and Muhammadan coins, and as regard the first he had acquired the only 3 gold coins known. A paper with plates of this series will appear in a future No. of the Numismatic Chronicle for which Mr. Gibbs left instructions before he left England.

Mr. Gibbs stated that he had been engaged with Dr. Hoernle in arranging the Society's collection, and he hoped that before long a complete catalogue might be ready which will be of great service to other Museums and collectors in showing what coins were actually extant.

6. *Some Observations on the Standing of Animals, the Perching of Birds and the Walking Pace of Man.*—By J. C. DOUGLAS.

I.—*The Standing of Mammals and Birds.*

Bird standing on one leg appears so strikingly unstable an object, that most observant persons feel the want of an explanation of first, why the bird chooses to stand on one leg rather than on both; and second, why this position is assumed as one of rest. It is obvious that the raised leg is rested, but it is equally obvious that the other leg has to do the work of both, and there is a decided reduction in stability, when using only one leg; but, from the bird resting in this position, there must be physiologically some economy, which renders the less stable position also less exhausting. This resting the limbs alternately is particularly frequent in natatorial birds

when standing : their legs apparently being very readily fatigued by bearing the weight of their bodies ; but although most striking in birds, it is also common to mammals. Horses particularly may be observed resting one leg at a time, and man does not as a rule stand equally on both legs, but puts his weight on each leg alternately ; even when sitting on a chair he commonly rests his legs alternately by hanging one across the other. I think this phenomenon is explained as follows :—Every muscle must have intervals of rest, and the muscles, supporting an animal which rests standing, must be rested alternately. To render this possible, the law of muscular exhaustion must in certain cases admit of the *load* on a muscle being increased, without proportionately *hastening* exhaustion. A muscle, removed from the body and stimulated to contract, suffers exhaustive loss of irritability, in direct proportion to the rapidity with which the stimuli follow each other, and exhaustion is most readily produced by stimuli following each other so rapidly, as to induce continued contraction, *i. e.*, tetanus ; but the amount of the load, if not too large, does not apparently affect the course of exhaustion, the exhaustion of two muscles bearing different loads being parallel. This being the case, it may be quite possible for an animal to even double the load on one set of muscles, without hastening their exhaustion. The muscles, bearing the additional load, not necessarily being exhausted proportionately sooner than under their own proper load, it is evident a bird resting on one leg does not exhaust it in time shorter in proportion to the increased load ; hence it is enabled to rest its whole system standing, a part at a time, just as completely as it could rest it all at once by laying down. The ease with which a bird stands on one leg is due to the relatively great surface of its base, the length of base, excluding the nails of the toes, reaching in small birds half the bird's height, that is, a man's feet would have to be two and a half to three feet long, to secure a proportional base ; the width of a bird's base in front is also relatively great.

II.—*The Perching of Birds.*

The bird, standing on one leg, is only one instance* of a very general case, and it rests itself in that attitude by reason of a physiological law governing muscular exhaustion ; but the case of a bird, sleeping on a perch, has been considered as differing from the case of a bird sleeping on one leg on the ground, and, while it is obvious the bird on the ground really maintains the upright position by balancing itself, precisely as a man does, this explanation has been considered as insufficient in the case of the perching bird. The explanation commonly accepted appears to have originated with Borelli about two hundred years ago, and is as follows :—

The flexors of the toes pass over the knee and heel in such a manner, that when the leg is bent by the weight of the body, the toes are flexed, the

sleeping bird is thus held securely on his perch by the weight of his own body; and some authors add "without fatigue." I purposely omit other details such as the structure of the joints by which the leg is stiffened laterally and vertically.

In the first instance, if the toes were flexed by the weight of the body putting tension on the muscles, this could not happen without causing fatigue, for the mere tension of a muscle influences its nutrition and waste, hence muscular exhaustion would result. That exhaustion is felt, is proved by the bird using only one leg while resting the other, also by the fact that it changes the leg from time to time, and that on waking, the foot is opened as if cramped. The evidence in favour of Borelli's explanation is anatomical; if the leg of a dead bird be bent under certain circumstances, the toes close together, and the foot may be so made to seize the finger of the experimentalist; if the leg be dissected, the movements of the parts may be clearly seen to bring about the result. But although this takes place in the dead bird, and is therefore possible in the live one, it by no means follows that this is the mechanism of perching. Even this purely anatomical phenomenon, which has been relied on to prove the physiological conditions, is not invariably present, for if a bird die with its leg contracted and its claw extended, the leg may be extended and flexed without closing the toes; in fact, the production of the phenomenon depends on the condition of the muscles after death. If the bird dies with its claws open and leg extended, the flexor muscles of the toes are not opposed by the extensors, they shrink and lose their elasticity when they die, and the phenomenon is produced; if they are opposed by the extensors, and the leg is bent, they lose their elasticity but cannot contract, and are therefore, when dead, elongated, and the phenomenon is not produced. It is very obvious in the live bird these muscles are elastic, and their exact length while living may be anything between the above extremes, but whether they act in the manner stated, depends entirely on their condition in the living bird, which is standing with his legs bent at their normal angle, these muscles being opposed by another set of muscles, and both being under the control of the bird's will. Because bending the leg bends the toes in a dead bird, in which the muscles have lost their elasticity and become shortened, to assume that therefore in the live bird, the mechanism acts precisely in the same manner, is an assumption in my opinion which is contradicted by observation of the living bird, and by the consideration of the general laws of which the perching bird is but a particular instance. Mammals and birds, on plane surfaces, maintain the upright attitude by balancing themselves, and birds standing on two legs on a perch do not, unless the perch be shaken, hold the perch, they simply balance themselves; the birds are prevented from slipping by the soft under-surface of the foot, which gives a foot-hold little liable to slip on the rough bark of a tree, and if the perch

be moved, slipping is still further guarded against, by turning in the nails so that their points touch the perch. If the perch be violently swung, the bird bends his legs, and rests with his breast on the perch, thereby lowering his centre of gravity. If a live bird be perched on the finger, it will be felt that it balances itself and does not grip, but it frequently uses the points of its claws, particularly of the hind ones. If the hand be moved forwards, the bird having a tendency to fall backward, it will be found to actually raise its front toes, and stick in the points of the hind claws; far from gripping tighter, it actually grips less tightly. If a sleeping bird be shaken, it awakes and puts down its second foot. If the perch be swung while the bird is asleep, the bird will be observed to move its body *in advance* of the movements of the perch. Although the sleeping bird usually uses the point of his hind nail, he does not always do so, and sometimes sleeps, obviously *not* holding the perch, but evidently balancing, the perch being stationary, but if the perch be moved slightly, the hind nail is used immediately. I cannot detect any bending of the leg, when the bird goes to sleep, beyond that which exists when it is awake, nor is the flexure of the last joint of the toes accompanied by a bending of the leg under ordinary circumstances. On the other hand there can be no doubt, that, in the live bird, flexure of the toes is independent of bending of the leg; a live bird can open or close its claws, with the leg straightened, or bent close to the body, and if a bird be under the influence of either, the flexure of leg and foot, simultaneously observed in the dead bird, is not observed. Birds commonly rest with the breast on the perch, in these cases, the claws will be found quite open; it is obvious in this case, that flexure of knee and heel does not cause flexure of the toes.

If bending of the leg necessarily caused flexure of the toes, the bird would in some cases evidently be inconvenienced, during incubation for instance. The idea, that the weight of the body tending to bend the leg might so flex the toes as to diminish the fatigue of perching, is obviously erroneous mechanically; for, if the grip of the perch were produced by the contraction of particular muscles, and if the same muscles were employed on the additional labour of preventing flexure of the leg, the two duties would not be so opposed as to make the strain on the muscles less than it would be if they performed but one duty, and the additional duty would increase the load not decrease it. It appears to me, that perching birds really balance themselves, just as mammals and birds on plane surfaces do; that they are enabled to do this just as man is, by means of opposing muscles; that flexure of leg and toes are independently under control of the bird's will as in man; and that the movements found dependent on each other in the dead bird after alteration of the muscles, are independent in the live bird; and that the large surface covered by the toes, the relative lightness

of the body, and the soft under-surface and sharp nails of the toes preventing slipping are sufficient to explain how a bird is enabled to sleep perched, just as a horse or a bird sleeps standing on a plane.

III.—*The Walking Pace in Man.*

Previous observers have assumed that the path traversed by man in walking is a straight one, that each step is alike, and that in natural walking, the complementary motions are evoked regularly and symmetrically. I have made a great number of observations, and have surveyed and plotted out natural paths across an extended plain, and I find the natural path is a wavy line. If the pace be slow, the deviation from the straight line is greater than if the pace be quick, and this deviation is greatest when the walk is very slow. The sinuous walk of a man slightly intoxicated, is an exaggeration of the normal walk; the difficulty of walking slowly beside a second person without occasionally coming against him, unless touch be kept in some way, is a matter of common observation. It appears that the adoption of sinuous paths in laying out gardens, with a view to imitate nature, is an unconscious imitation (often exaggerated) of the foot paths formed naturally, whenever an extended plain has to be crossed by persons on foot, and this sinuosity is a consequence of the natural walk of man being in a sinuous path, probably by reason of the equilibrium being imperfect, and the movements not strictly symmetrical.

7. *List of Diurnal Lepidoptera inhabiting the Nicobar Islands.*—By J. WOOD-MASON, Deputy Superintendent, Indian Museum, and L. DE NICEVILLE.

(Abstract.)

In this paper which will appear in the Journal, Part II, the authors state, that in Mr. F. Moore's paper on the Lepidopterous Fauna of the Andaman and Nicobar Islands, only 23 species of rhopalocerous Lepidoptera are recorded from the Nicobar group.

The Indian Museum has recently received from Mr. F. A. De Roepstorff a collection of Nicobar butterflies consisting of thirty-four species, twenty-five of which are recorded, in the present paper, for the first time, and two are described as varieties of known forms.

This paper will appear in the Journal, Part II.

LIBRARY.

The following additions have been made to the Library* since the meeting held in February last.

TRANSACTIONS, PROCEEDINGS AND JOURNALS,

presented by the respective Societies and Editors. •

Berlin. K. preussische Akademie der Wissenschaften,—Monatsbericht, September and October 1880. .

Bordeaux. Société de Géographie Commerciale,—Bulletin, No. 2.

Calcutta. Geological Survey of India,—Memoirs, Palæontologia Indica, Series XII, Vol. III, Part 1.

Feistmantel, Dr. O.—The Flora of the Talchir Karharbari Beds.

Lisbon. Sociedad de Geographia,—Boletín, Second Series, No. 2.

London. Royal Microscopical Society,—Journal, Vol. III, Nos. 6 and 6a, December 1880.

———. Royal Astronomical Society, Monthly Notices, Vol. XLI, No. 1.

———. Institution of Mechanical Engineers,—Proceedings, No. 3, 1880.

———. The Academy,—Nos. 443, 454 to 456.

———. The Athenæum,—Nos. 2777 to 2780.

———. Nature,—Vol. XXII, No. 574, and Vol. XXIII; Nos. 585—588.

München. K. b. Akademie der Wissenschaften,—Sitzungsberichte der mathematisch-physikalischen Classe, Parts 2—4, 1880.

———. ———. ———. philosophisch-philologischen und historischen Classe,—Vol. II, Part 3, 1879; and Parts 1—3, 1880.

———. ———. Abhandlungen,—historische Classe, Vol. XV, Part 2.

———. ———. ———. philosophisch-philologischen Classe,—Vol. XV, Part 2.

———. ———. ———. mathematisch-physikalischen Classe,—Vol. XIII, Part 3.

New York. American Oriental Society,—Proceedings, October 1880^{but}

Paris. La Société d'Anthropologie,—Bulletin, Vol. III, Part 3, April to July 1880.

———. La Société de Géographie,—Bulletin, Vol. XX, November 1880.

Pisa. Società Toscana di Scienze Naturali,—Atti, Processi Verbalì, 14th November 1880.

Rome. Società degli Spettroscopisti Italiani,—Memorie, Dispensa 9, September 1880.

Roorkee. Professional Papers on Indian Engineering,—Vol. X, No. 39, February 1881.

Vienna. Kaiserliche Akademie der Wissenschaften,—*Fontes Rerum Austriacarum*, Vol. XLII, Part 2.

———. ———. *Archiv für Österreichische Geschichte*,—Vol. LIX, Parts 1—2, and Vol. LX, Part 1.

———. ———. *Sitzungsberichte*,—mathematisch-naturwissenschaftliche Classe, Part I, Vol. LXXIX, Nos. 1—5; Vol. LXXX, Nos. 1—5: Part II, Vol. LXXIX, Nos. 4—5; Vol. LXXX, Nos. 1—5; Vol. LXXXI, Nos. 1—3: Part III, Vol. LXXX, Nos. 1—5; Vol. LXXXI, Nos. 1—3.

———. ———. ———. philosophisch-historische Classe,—Vol. XCIV, Nos. 1—2; Vol. XCV, Nos. 1—4, and Vol. XCVI, No. 1.

———. ———. philosophisch-historische Classe, *Denkschriften*, Vol. XXX.

———. ———. mathematisch-naturwissenschaftliche Classe,—*Denkschriften*, Vol. XLI.

Yokohama. Deutsche Gesellschaft für Natur-und Völkerkunde Ostasiens,—*Mittheilungen*, December 1880.

———. Asiatic Society of Japan,—*Transactions*, Vol. VIII, Part 4.

Zagreb. Arkeologickoga Društva,—*Viestnik*, Vol. III, No. 1.

PAMPHLETS,

presented by the Authors.

LYALL, C. J. *Sketch of the Hindustani Language*. Sm. 8vo., Edinburgh, 1880.

SCHWENDLER, L. *Report on the Electric Light at the East Indian Railway Company's Station, Howrah (Calcutta)*. Fcp., Calcutta, 1881.

MISCELLANEOUS PRESENTATIONS.

CARRINGTON, R. C. *List of Light-Houses and Light-Vessels in British India, including the Red Sea and Coast of Arabia (Suez to Singapore)*. Obl. 4to., Calcutta, 1881.

MARINE SURVEY DEPARTMENT.

DÖLLMEIER, J. v. *Das Haus Wittelsbach und seine Bedeutung in der deutschen Geschichte*. 4to., Munich, 1880.

ROCKINGER, DR. L. *Die Pflege der Geschichte durch die Wittelsbacher*. 4to., Munich.

ZITTEL, DR. K. A. *Ueber den geologischen Bau der libyschen Wüste*. 4to., Munich.

K. b. AKAD. DER WISSENS., MÜNCHEN.

WRIGHT, W. *The Palæographical Society. Facsimiles of Ancient MSS. Oriental Series. Part V.* Fol., London, 1880.

PALEOGRAPHICAL SOCIETY.

Report on the Administration of the Land Revenue Department of the Central Provinces for the Revenue year 1879-80. *Fep., Nagpur, 1881.*

CH. COM., CENTRAL PROVINCES.

Account of the Operations of the Great Trigonometrical Survey of India, Vol. VI. 4to., Dehra Dun, 1880.

Synopsis of the Results of the Operations of the Great Trigonometrical Survey of India. Vol. VII. 4to., Dehra Dun, 1879.

SURVEYOR GENERAL OF INDIA.

Sixteenth Annual Report of the Sanitary Commissioner with the Government of India, 1879. *Fep., Calcutta, 1881.*

SANITARY COMMISSIONER WITH THE GOVERNMENT OF INDIA.

Indian Forester, Vol. VI, No. 3, January 1881.

BENGAL GOVERNMENT.

PALMER, E. H. (Sacred Books of the East, Vols. VI and IX). The Qurân, 2 Vols. 8vo., Oxford, 1880.

FALLON, DR. S. W. New English-Hindustani Dictionary, Part I.

HOME, REVENUE AND AGRICULTURAL DEPARTMENT.

PERIODICALS PURCHASED.

Göttingen. Gelehrte Anzeigen,—Nos. 3—4, and Index for 1880.

———. Nachrichten,—Nos. 20—21, and Index 1880 ; No. 1, 1881.

Leipzig. Annalen der Physik und Chemie,—Vol. XII, Part 1.

———. Beiblätter,—Vol. V, No. 1.

London. Society of Arts,—Journal, Vol. XXIX, Nos. 1469—1471.

———. Chemical News,—Vol. XLIII, Nos. 1103—6, and Index to Vol. XLII.

———. Publishers' Circular,—Vol. XLIV, Nos. 1040—1.

Paris. Comptes Rendus,—Vol. XCII, Nos. 1—4.

———. Revue Scientifique,—Vol. XXVII, Nos. 2—5.

———. Revue Critique,—Vol. XI, Nos. 2, 4—5.

———. Revue des deux Mondes,—Vol. XLIII, Nos. 2 and 3.

———. Journal des Savants,—January 1881.

———. Annales de Chimie et de Physique,—Vol. XXI, Decem^r 1880.

Philadelphia. Manual of Conchology, Part 8.

BOOKS PURCHASED.

GOULD, J. The Birds of Asia. Part XXXII. Fol., London, 1880.

GOULD, J. The Birds of New Guinea and the Adjacent Papuan Islands. Part XI. Fol., London, 1880.

SALLET, A. VON. Die Nachfolger Alexanders des Grossen in Baktrien und Indien. 8vo., Berlin, 1879.

PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL.
FOR APRIL, 1881.

The Monthly General Meeting of the Asiatic Society of Bengal was held on Wednesday, the 6th April, 1881, at 9:15 P. M.

H. B. MEDLICOTT, Esq., F. R. S., President, in the Chair.

In accordance with the announcement made at the Annual Meeting held in February last, the President ordered the balloting lists for the Election of the Council and Officers for 1881 to be distributed, and appointed Col. J. Seonce and Major H. S. Jarrett Scrutineers.

The PRESIDENT announced that the Scrutineers declared the result of the ballot to be as follows :

• *President.*

The Hon'ble Sir Ashley Eden, K. C. S. I., C. I. E.

Vice-Presidents.

Dr. Rājendralāla Mitra, C. I. E.

C. H. Tawney, Esq., M. A.

The Hon'ble H. J. Reynolds, B. A., C. S.

Secretaries and Treasurer.

J. Wood-Mason, Esq.

Dr. A. F. R. Hoernle.

A. Bedler, Esq., F. C. S.

V. Ball, Esq., M. A., F. G. S.

Other Members of Council.

H. B. Medlicott, Esq., F. R. S.

J. Westhead, Esq., C. S.

J. Eliot, Esq., M. A.

D. Waldie, Esq., F. C. S.

H. Beverley, Esq., C. S.

Babu P. C. Ghosha.

L. Schwendler, Esq.

Mr. Westland said that he trusted he would be allowed as one of the retiring Vice-Presidents of the Society to propose a vote of thanks to Mr. Medlicott, the out-going President. Mr. Medlicott had unusual qualifications for the post both as a man of science, and as a man of business; other gentlemen could testify to Mr. Medlicott's services rendered to the Society in the former capacity, he himself could say from his own experience, how completely and efficiently Mr. Medlicott managed the business of the Society. The Society was under great obligations to Mr. Medlicott, for the labour he had so successfully and so willingly bestowed on the management of its affairs.

In resigning the President's chair, Mr. Medlicott spoke as follows :

It is very gratifying to me to return thanks for the response this meeting has accorded to the kindly words spoken by Mr. Westland. I shall not cease to endeavour to be of service to the Society.

The brief remarks I wish to make on retiring from the office of President would have been more appropriate had this event taken place at the annual meeting, as is customary. As to the few observations I did make on that occasion, in referring to the report for the preceding year, I was surprised to find that they have been printed in our Proceedings for February as "the President's address." It looks like a stroke of irony on the part of our Secretary; but I acquit him of the charge. I by no means meant to make a mockery of the imposing undertaking known as a Presidential Address. On the contrary, I had come prepared to take my leave of office with a humble apology for what many may look upon as my spontaneous collapse. At the same time I wished to justify the step I had taken in resisting what is an innovation, and as I believe a mistaken one, in the practice of our Society. At the previous annual meeting I gave a notice of motion to that effect; and I think the matter of sufficient importance to recur to it now.

The tendency I would deprecate—that of following the practice of learned bodies elsewhere—is superficially laudable; but I may designate it as unpractical and therefore unscientific. The essence of practical reason is, the intelligent apprehension of conditions, and adaptation thereto; in view, no doubt, of a best conceivable standard, but the premature adoption of that standard may be a fatal form of blunder. I do not allow that my action arises from a defective estimate of what a scientific Society should be: it is rather that the standard I look to is incompatible with ourselves and our circumstances. Let us at all events avoid shams and false pretension. We are by profession a scientific body; but our body has been and is to a large extent non-scientific, or even anti-scientific; and symptoms were not wanting that a marked prominence of the scientific element in the administration would lead to atrophy of the body. Few

will deny that, constituted as we are, our President should often be a man known to the general public. A complete obstacle to this would be, and has been, the innovation of an annual presidential discourse upon science in some form, which performance is by no means worth the sacrifice. The real credit of the Society and of its working members depends on the amount of information to be found in its publications. I would, therefore, ask those members to be content with this solid advantage afforded by the Society, and to forego an ambition of flags and fireworks.

I must not, however, allow it to be said, that I am making a virtue of necessity—shielding my incapacity under the guise of renunciation. Of actual incapacity I cannot speak: but I do confess myself unable, without a great deal more leisure than I can command, to prepare what I should care to offer as an address to a learned Society. This touches, perhaps, the most vital objection to the practice I wish to see held in abeyance for special occasions. You can seldom find a suitable president of any denomination who is not already an overworked official; and very few men thus placed so overflow with knowledge as to undertake so serious a task without inadmissible interference with regular duties. Some of you are aware how difficult it has been of late to find a president. More than one member thoroughly competent to lead and to address the Society have declined the post; and though I cannot speak with certainty, I strongly suspect that the obnoxious innovation had much to say to our disappointment. They have escaped by passive resistance; it has fallen upon me to incur the obloquy of overt rebellion, for which I must crave your indulgence.

I have now the satisfaction of handing over office to a President under whom the Society should flourish in all its branches.

Mr. C. H. TAWNEY, M. A., Vice-President, then took the Chair.

The minutes of the last general Meeting were read and confirmed.

The following presentations were laid upon the table—

1. From the Californian Academy,—Early Discoveries of the Hawaiian Islands in the North Pacific Ocean, by H. A. Peirce.

2. From the Registrar, Calcutta University,—Tagore Law Lectures, 1879,—The Law relating to the Hindu Widow, by Troilokyanath Mitra.

3. From the Bengal Government,—The Wild Silks of India, principally *Tusser*, by T. Wardle.

4. From the Madras Government,—(1) A Classified Index to the Sanskrit MSS. in the Palace at Tanjore, by A. C. Burnell, (2) Photographs of Humpi in the Bellary District, of Amravati, of Undapalli and of Kondapalli in the Kistna District.

5. From the Geographical Society of Lyons,—Rapport Annuel, Séance Solennelle, 23rd December 1880.

6. From the authors,—Table showing the conjugation of the Verb substantive in Eastern Hindi, by G. A. Grierson. A Detailed Analysis of Abdul Ghafur's Dictionary of the Terms used by Criminal Tribes in the Panjáb, and a sketch of the Changars and of their Dialect, by Dr. G. W. Leitner. Bi-Metallism at 15½ a necessity for the Continent, for the United States, for England, by H. Cernuschi. *

7. From the Home, Revenue and Agricultural Department,—A Comparative Grammar of the Gaudian Languages with special reference to Eastern Hindi, by Dr. A. F. R. Hoernle.

8. From Dr. A. F. R. Hoernle,—Nos. 5 and 6 of 1880 of the Deutsche Litteratur Zeitung, and On the Khorsabad Inscriptions, by Edward Hincks.

9. From the St. Xavier's College Observatory,—Observations taken from July to December 1880.

10. From the Political Agent, Bundelkhand,—14 Copper Coins.

The following Gentlemen are candidates for ballot at the next meeting.—

1. J. Cockburn, Esq., proposed by H. Rivett-Carnac, Esq., seconded by Dr. J. Anderson.

2. Capt. E. Molloy, 5th Ghurkas, Abbotabad, proposed by G. Hughes, Esq., C. S., seconded by H. W. McCann, Esq., M. A., D. Sc.

The SECRETARY reported that the Hon'ble B. W. Colvin and the Bishop of Rangoon had intimated their desire to withdraw from the Society; and that the elections of Mr. J. A. Brown and the Rev. J. S. Doxey had been cancelled under Rule 9.

The COUNCIL reported that Mr. J. C. Douglas had left India, and that Mr. V. Ball had been asked to officiate as Treasurer in his place.

The SECRETARY reported that the following coins had been acquired under the Treasure Trove Act:—

From Deputy Commissioner of Kheri, 4 silver and 4 copper coins.

From Deputy Commissioner of Chhindwara, 6 copper coins.

The SECRETARY announced that the following works had been sanctioned for publication in the Bibliotheca Indica Series, on the recommendation of the Philological Committee:

1. The *Parāśara Mādhava Smṛiti*, to be edited by Paṇḍit Chandra Kānta Tarkālakāra, who has just completed an able edition of another law book, the *Gobhiliya Sūtra*. Several MSS. are available and the work will be edited with *Mādhava's* commentary.

2. An English Translation of the *Suśruta*, to be prepared by Dr. U. C. Datta. This is an ancient Hindu medical work, hardly less important than the Charaka. A portion of it has been already translated by another Babu, under the supervision of Dr. Charles, who has placed his MS. at the service of the Society.

*3. The *Nagaid el Fezazdaq and Jerir*, to be edited by Mr. C. J. Lyall in conjunction with Dr. Wright of Cambridge. This work is extremely interesting both from the philological and historical point of view, as it abounds in references to the old pagan history of the Arabs, and the commentary with which the text is provided elucidates many obscure points of that subject.

• Mr. H. F. BLANFORD, F. R. S. exhibited photographs of the Van Rysselberghe Meteorograph, and specimens of the engraved plates produced by it, with proof impressions from them; and gave a general description of the instrument and its working. A specimen of the record obtained will be found in plate I.

After referring to the fact that eye readings of instruments, if taken only 3 or 4 times in the day were insufficient to meet the demands of modern Meteorological enquiry, and if taken hourly and carried on night and day, demanded such an establishment of observers as to practically restrict detailed observation to a few costly observatories, he observed that, for nearly half a century, inventive ingenuity had been directed to the construction of self-registering or autographic instruments. Among the earlier inventions of the kind were Whewell's and Osler's anemographs, King's barograph, &c., and among the more elaborate of later inventions, the Kew thermographs and barographs which register by photography, Theorell's barograph which prints in figures the value of the barometer reading at short intervals, and Beekley's anemograph.

These instruments were designed to register either one element of observation only, or at the utmost two, as in the case of the thermograph and the anemograph. But some inventors had gone beyond this, and had aimed at registering all the more important elements of meteorological observation by means of one and the same recording apparatus. Such instruments are termed meteorographs, and in order to establish communication between the several instruments and the recording apparatus, the former fixed in various parts of the building according to the character of the required exposure, the latter in a secure place in the interior of the building, the aid of electricity had to be called in. A very elaborate instrument of this kind had been in operation for many years at Berne; another, less elaborate, invented by the late Father Secchi, at Rome; and also at Zi-ka-wei near Shanghai and at St. Xavier's College at Calcutta. But the latest and most compact, and at the same time the least costly and

most effective of all, is the very beautiful instrument, originally designed by M. Van Rysselberghe and constructed with many original improvements by the very ingenious mechanician-M. Schubert of Ghent.

Two of these instruments have lately been received for use at Allahabad and Lahore; and while awaiting the provision of the requisite accommodation, at the places of their destination, one of them has been set up and is now in operation at the Meteorological office, No. 4 Middleton Row, Calcutta, and is open to the inspection of such members of the Society as may desire to examine it.

The details of the mechanism could hardly be understood without watching the instrument at work, and even then not without some careful study and examination. All that could be attempted would be to give some general idea of its principles.

The instrument registers, at successive intervals of ten minutes, the readings of (1), the dry and wet bulb thermometers; (2), the rain gauge; (3), the direction of the wind; (4), the height of the barometer and (5), the rate of the wind movement in the previous interval. All these are engraved in succession on a thin metallic plate fixed on a revolving cylinder, and, at the same time, the scale of all the instruments is engraved, so that the values may be at once read off; and when the plate is removed from the cylinder and the trace bitten in with etching liquor, it may be printed from in an ordinary copper-plate press, and any required number of copies obtained for distribution.

The principal motive power by which the recording cylinder is made to revolve, and the electric connections with the several instruments made and interrupted in succession, is given by clockwork.

This is set in action, on the completion of each ten minutes interval, by an ordinary clock, the minute-hand of which makes contact with a spring projecting from the brass rim which surrounds the clock face, and completes an electric circuit; the current of which, acting on an electro-magnet releases a detent, allowing the cylinder to revolve, and at the same time causing a shaft to set in action a somewhat complex system of commutators.

Two batteries are employed, each consisting of eight Daniell's elements. One of these serves to work the burin which engraves the trace, by acting on an electro-magnet which pulls back the burin from the cylinder, against which it otherwise presses by means of a spring; the other, the regulating current, is directed through the several instruments in succession by means of the commutators, and then, acting on a series of electro-magnets makes and breaks the engraving current at the proper intervals according to the values indicated by the several instruments. The graduation is effected by passing one or the other current through a brass ring which revolves with the

cylinder and bears a number of deep grooves on its surface corresponding to the graduation of the instruments. A spring which presses on the grooved surface and conveys the current, suffers an interruption of contact when passing over the grooves, and thus produces a minute break in the engraved line, and, when the burin is not engraving, allows it to mark a series of dots corresponding to the graduation.

At the commencement of each revolution and before the registration begins, an endless screw which carries the burin is made to revolve through a sufficient distance to bring the burin about $\frac{1}{80}$ of an inch lower on the plate; and at the end of every two hours through a somewhat greater distance, leaving a broader interval between the engraved lines and furnishing a time-scale.

The first instrument which gives its trace is the dry bulb thermometer. The thermometers are open at top, and the tubes give admission to two probes of platinum wire, which, by means of the mechanism before noticed are made to descend slowly until they form contact with the mercurial columns. As the dry bulb thermometer always (except in an absolutely saturated atmosphere) stands at a higher temperature than the wet bulb, its contact is first made, completing the regulating circuit. This acts on an electro-magnet, which, by attracting an armature, completes the burin current and draws the burin back from the cylinder; and, at the same time, causes a catch to start forward and arrest the further descent of the platinum probe. That of the wet bulb continues to descend, until, on making contact with the mercury, the regulating current acts on another electro-magnet, which interrupts the burin current, releasing the burin, which again presses on and engraves the plate till the regulating current is cut off by the action of the commutator.

Next comes the trace of the rain gauge. The rain gauge is now situated on the roof of the office and communicates with the registering apparatus by two wires, which form a part of the circuit of the regulating current. The regulating current (or a branch of it) can always pass through this circuit, when contact is made in the rain gauge. When rain is falling it passes from the collecting funnel into a tip bucket, and this when full tips and empties itself, at the same time making a metallic contact which allows a momentary current to pass. This current acts on an electro-magnet in the registering apparatus below, the armature of which acting on a ratchet wheel makes a small brass cylinder revolve through a single tooth. One half of this cylinder is of greater diameter than the other, the two surfaces being separated by a helical margin, such as might be produced by applying a wedge-shaped strip of brass plate to the surface of a cylinder, with the two rectangular edges of the wedge respectively parallel to the axis and base of the cylinder, while the hypotenuse forms the helical margin.

A spring, which the mechanism, set in motion by the clockwork, causes to ascend and descend in a direction parallel with the axis of the cylinder, comes in contact with the projecting portion, the breadth of which is the greater the more rain has entered the gauge. During this contact, the regulating current passes, cutting off the circuit of the engraving current, and setting free the graver, which records a line on the plate corresponding to the length of the cylindrical surface in contact with the spring.

Next come the wind directions given by the anemometer. In general construction, the anemometer resembles that of Beckley. The direction of the wind is given by two windmill regulators, which cause to revolve a plate forming the cover of a flat cylindrical box. The plate is metallic and presses on eight insulated springs, set at the eight principal divisions of the compass, and connected with eight wires which lead to the recording apparatus below. There is also a ninth wire always in metallic connection with the revolving plate, and the regulating current passes into the upper plate and down by 6 or 7 of the direction springs and their wires whenever the anemometer wires are brought into circuit by the action of the clockwork. It is never completed through the whole 8 springs. In the upper plate, opposite to the pointer which indicates the wind direction, is let in an insulating piece of glass, and this is always in contact with one and sometimes with two adjacent springs, through which therefore, the communication is cut off.

The eight direction wires communicate with eight small studs; over which the clockwork mechanism causes a small spring to pass, making contact successively. The regulating current, passing through these and acting in the manner already described, allows the graver to make a short mark corresponding to each of them, with the exception of that one (or two) thrown out of circuit by the plate of the anemometer.

Next comes the barometer, and in the case of this instrument, M. Von Rysselberghe has adopted a very beautiful contrivance which dispenses with the usual corrections for temperature, and enables the barometer to give at once its reduced or corrected value. The principle is discussed by M. Van Rysselberghe in his original paper in the volume of the *Bulletins de l'Académie Royale de Bruxelles* for 1873; and I need only describe it in general terms, by saying that in a syphon barometer such as is used in the meteorograph, the quantity of mercury in the instrument may be so adjusted to the diameter of the tube, that the level of the mercury in the shorter or open arm of the tube is unaffected by changes of temperature. In the open arm of the tube, therefore, the changes of level take place under changes of pressure only. The reading of the barometer is communicated by an arrangement similar to that already described in the case of the thermometers; viz., by a steel cylindrical probe which

descends until it makes contact with the mercury, closing the regulating current which, in this case acting on an electro-magnet, completes the burin circuit, and causes the withdrawal of the graver.

Lastly the counter of the revolutions of the anemometer cups is recorded. The cups of the anemometer complete the circuit of a branch of the regulating current, once in each revolution; and this current, acting on a ratchet connected with the mechanism below, causes a graduated metallic rod to be pushed up through staples in which it works stiffly, as long as the recording mechanism is not in action. But coincidently with the last part of the revolution of the recording cylinder, a catch, in descending, makes contact with a projection on the graduated metallic rod, brings the latter back into its initial or zero position, and during the time of contact completes the regulating current, which cuts off the engraving current, and allows the burin to engrave a line of length proportionate to the displacement of the rod.

Dr. A. F. R. HOERNLE exhibited some copper coins and some antiquities found in the ruined town of Khokhrakote lying a short distance to the north of the present town of Rohtak and read the following account of their discovery written by Durga Pershad, Tehsildar of Rohtak.

"Although nothing has to the present day been discovered either from inscriptions, engraving or plates, which in ancient times used to be put into foundations of buildings, to shew the year in which the towns of Rohtak, Khokhrakote, Lalpur and Brahna were built, tradition gives the following brief account.

"This ruined town of Khokhrakote is situated to the north of Rohtak and thousands of years have passed since it was ruined.

"It is said that the town of Rohtak was founded a few thousand years ago by Raja Rohtas, son of Raja Prichand, that it has derived its name from him, and that on the side of Khokhrakote was built an extensive fort with a small population. This population on the foundation of Rohtak gradually disappeared, and the materials of the fort were removed for the construction of another to the east of the town of Rohtak which is now inhabited by the Sikhs."

"It is also said that this ruined town of Khokhrakote, besides the fort alluded to above, consisted of houses of the employes of the State, a market with a few shops of workmen forming a cantonment, and palaces of petty Nawabs and persons of substance, but that from the time of Raja Rohtas it has ceased to be inhabited.

"Another tradition says that it was ruined some time before the foundation of the town of Rohtak.

"These two traditions, therefore, almost entirely correspond with one

another, as, if at the time Rohtak was inhabited, there was a fort at Khokhrakote, it is very probable that it must have been dismantled and the materials removed to Rohtak.

"To the west of Rohtak lies the town of Lálpur, which is said to have been founded by Lálchand Seth a millionaire, and was mostly occupied by money-dealers (Mahájans) and Bráhmans, with a small number of Khatries.

"In Sambat 1772 this town had succumbed to an overflowing of a branch river named "Chomang", owing to the inundation of the Jamna river. The marks as to the existence of the former are still visible in the neighbourhood of máúzás Sānghi and Kheri Ballab, by the presence of a few bridges and the uneven ground on which it flowed. The present Goháná canal which runs towards this ruined town of Lálpur, into the Rohtak Parganá, has also been constructed on the bed of the said river.

"Large bricks are dug out from the ruined buildings of this town and used in building others at Rohtak.

"With a view to discover objects of antiquity, the Commissioner of the Division and Mr. Wood, Deputy Commissioner, in September or October 1879, inspected these ruined towns and proposed to dig the mound, close to the remains of the old fort, called "Nawabi tilá" by the residents of Rohtak, by reason of its being supposed to be the site on which the palaces of the Nawábs were formerly situated, and also on account of its being the highest of all the mounds in this ruinous tract.

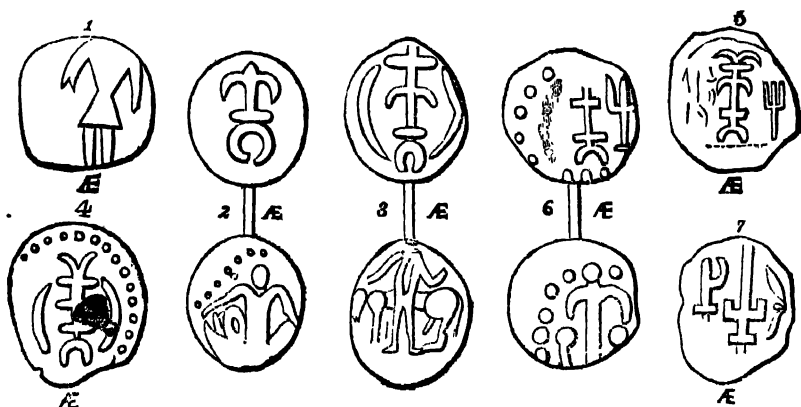
"In November 1879, the District Committee sanctioned an expenditure for the digging of this mound. It was first dug to a depth of 8 or 10 feet below the surface, when a large quantity of earth, which seemed as if it had been thrown in, was dug out, and then ruined walls were disclosed and a quantity of interesting relics, such as pieces of earthen vessels, bones, and rusty iron, as also a few shells. At about 15 feet lower down, the foundations of the walls were at an end, and again earth as above noted was dug out. The diggings continued for 7 or 8 feet, when a second set of ruined walls was discovered and a small room which contained some decayed jawár grain which on being touched at once became dust. This, and an image which, from being disfigured by decay, could not be made out, but presumably of a deity, the face being very much like the representation of Buddhá, were found amongst debris and earth. The foundations of the second set of walls having ended at a depth of about 6 or 7 feet, the remains of a third set of walls appeared at about a depth of 38 feet, and when dug to about 6 feet, a small earthen pot, with the mouth covered over with mud, containing some small coins, was found. On the evening of 8rd January 1881, these coins with other relics, shells &c., that were discovered from the mound in question at Khokhrakote, were produced before His Honor the Lieutenant-Governor when encamped at Rohtak. His Honor

after inspection was pleased to order a few of the coins to be sent to him, together with an account as to their discovery.

"The excavations were carried on to a depth of 60 feet, and the expenditure incurred was Rs. 459."

Dr. Hoernle observed that there was some uncertainty as to the real depth to which the excavations were carried. At the end of the account, it was stated that the depth was 60 feet, but the amount of the depths of the several diggings previously detailed in the account was much larger, about 80 feet.

With regard to the coins, he remarked that they appear to be late Indo-Scythic. In Prinsep's *Indian Antiquities*, p. 417 (Plate XXXIV, Nos. 11, 12, 13) they are classed as Indo-Sassanian; but wrongly. They have no trace of the characteristic Sassanian fire-altar, nor of the head of the king in profile. On plate VIII, No. 8 and Plate IV, No. 10 (*ibidem*), they are classed as Indo-Scythic, which they undoubtedly are, or rather probably late imitations of them. This is shown by the characteristic "Śiva and bull" on the reverse, so well known from the coins of Kadphises and Vasudeva (see *Ariana Antiqua*, Plates X, No. 12, XIV, No. 14). The deterioration from the original type can be distinctly traced, in the present series of coins, on the obverse (see facsimile woodcuts). The coins of Kadphises and Vasudeva have, on the obverse, the full figure of the king with a trident in front.



The full figure is still clear on No. 1 (compare No. 10 on Plate IV of Prinsep's *Indian Antiquities*, Vol. I); on No. 2 it has shrunk into mere crude outlines; in Nos 3 and 4 the outlines are still more attenuated; in Nos. 5 and 6 the trident may be seen in front of the skeleton figure, on

the right ; in No. 7 the same on the left. The reverse of No. 1 resembles that of No. 2. The reverses of Nos. 4, 5, 7 resemble that of No. 3. In No. 6 the same deteriorating process may be observed on the reverse ; the man and bull having been attenuated to mere outlines. It may be noted that on Vasudeva's coins, there is a trident in front of the king on the left, and another in his hand on the right ; and further, that the final skeleton (as in Nos. 4 and 5) closely resembles the old Nāgarī characters नो (i. e., न + न + ॐ in conjunction), which are very much like the characters that are seen under the arm of the king (in full figure) in the earliest Gupta coins (e. g., of Ghaṭotkacha). This fact would seem to link the present coins on to the Gupta coins.

The antiquities consisted of 16 pieces ; viz., 3 images, 2 pieces of rusty iron, 2 pebbles, 3 globular stones, 3 shells (*cowries*), 4 pieces of "ivory" ornaments. One of the images is a rude, hollow iron figure, broken in 3 pieces representing a squatting man with a top-knot and long pendent ears, another is a very rude full-sized male figure, bow-legged and with arms a-kimbo, unclothed ; apparently a votive figure or a mere child's toy. The third is the full male figure of a divinity, cut in low relief on a small flat piece (apparently) of the well-known Agra soap-stone, with head-dress, necklace and sacred thread, both arms turned upwards and each supporting some conical object. Of the two pebbles one is the exact half of a well-turned globe ; the other is in its natural form. The three globular stones are really spindle-whorls made of clay, of the volcano-shaped kind, described and figured by Mr. Rivett-Carnac in the Journal Asiatic Society, Bengal, Vol. XLIX, page 127. The four so-called "ivory" pieces are the broken parts of two armlets. They are not of ivory, however, as described by the finders, but of conch-shell, as pointed out by the Natural History Secretary.

Mr. BALL, Officiating Natural History Secretary, exhibited samples of the sticks used in the hilly districts of Bengal, for producing fire and in connection with them made the following remarks :

Some years ago I exhibited a sample of the fire sticks used by the inhabitants of the Nicobar islands ; these were cut from some ~~soft~~ white wood, possibly from a species of *Bombax*. Subsequently in Sambalpur I found that the inhabitants of the jungles there knew how to make fire in exactly the same way, the sticks used being either of the small solid bamboo or the branches of the *pothur* tree (*Croton oblongifolium*). In this case my attention was drawn to the fact by finding sticks which had been so used cast away in the jungles. On asking the coolies with me whether they understood the art, they immediately set to work in the following manner.

Breaking off two pieces of dry bamboo which had about twice the diameter of an ordinary lead pencil, they pointed one of them at one end, and on the side of the other they made a small pit to receive the point; from the pit a groove or notch was cut across on the side of the stick. This second stick being placed horizontally in position on some dry grass and leaves, was held there by the toes of the principal operator who squatted down for the purpose. Taking the first stick between the palms of his hands and placing the point in the pit, by rubbing his palms together the stick was made to revolve backwards and forwards, and the second operator relieved the first by commencing at the top as the other worked down to the bottom. They continued thus alternately relieving one another, till, in an incredibly short space of time, the pit became charred and soon began to smoke, the fine dust resulting from the friction falling down the already mentioned slit formed a small pile on the tinder and caught the first spark. This being carefully nursed and blown upon, soon burst into a flame.

At the ethnological section of the British Association meeting in 1878 I exhibited and described some of these sticks and the communication appeared to excite a considerable degree of interest. This, added to the fact that I have found that even in India many people are not aware that the knowledge of how to produce fire with two small sticks, so far from being extinct, is probably universal throughout some wide tracts in this country—has led me to make further enquiries. On the only two occasions upon which I have been in the jungle this year I have asked the first regularly jungly men I met with whether they could make fire; both replied in the affirmative and made good their words by producing a flame in a very short space of time. The first case happened not many miles distant from Deoghur; here the sticks used were the already mentioned *pothur* (*Croton oblongifolium*): these are now exhibited. The second case occurred in the centre of the Kharakpur Hills where I came across a tribe of people called Naya. Their headman, who, by the way, was a most curious and amusing individual, on being asked to produce fire sent one of his companions for the sticks to the jungle close by. He returned, not with the *pothur*, but with the woody stems of a thorny creeper. The thorns having been removed, a pit was made at a node or joint, and then, in the usual way, a very few turns produced a spark; these sticks I also now exhibit. This creeper has three native names, *Kumari* (or *Kumree*) *Dahnee* and *Maskanti*; although I omitted to get leaves or flowers I am fully satisfied that it is a species of the genus *Smilax* and in this opinion Dr. Feistmantel agrees with me. Most of the common species of *Smilax* have scarcely got woody stems, and in this one it is noteworthy that the wood much more closely resembles that of an Endogenous, than that of an Exogenous plant.

So anomalous are the characters of the genus that Lindley long ago proposed a special class, the Dictyogens, for its reception. Among its anomalous characters I do not know whether its woody structure has been specially noticed.

There is every probability that this *Smilax* was the so-called Vine which was known to the ancients as affording the wood with which fire was produced.

Dr. Feistmantel has called my attention to a passage in Sir Emerson Tennent's 'Ceylon' (Vol. II, p. 451) in which the Veddahs are described as making fire in this way with the pieces of an arrow which they broke in two for the purpose.

Mr. Tawney referred to Professor Kuhn's 'Herabkunft des Feuers und des Göttertranks', and mentioned that it appeared from passages quoted by that writer from Greek and Latin authors, that the wood of certain creepers was preferred for kindling fire by friction. Theophrastus states that the lower of the two pieces of wood should be made of ivy, or of a creeper named ἀθραγίνη, resembling the wild vine. Pliny also tells us that *edera* and *vitis Silvestris*, *alia quam labrusca*, et *ipsa ederae modo arborem scandens* were preferred for the lower of the two fire-sticks, or πυρέα as they were called by the Greeks.

It was therefore very interesting to observe that the fire-sticks exhibited by Mr. Ball appeared to be made of the wood of a creeper, and a creeper resembling in appearance the wild vine. Among the Greeks and Romans the upper stick or borer was frequently made of laurel. But it is also stated that both sticks were often of the same wood, and the wood of the thorn, the ilex, and the linden seem also to have been used. Kuhn points out that Greek, Roman, and Indian accounts represent the process of attrition as performed by the help of a thong, and not as Mr. Ball saw it, with the hands alone.

The following papers were read—

1. *On the Relations of Cloud and Rainfall to Temperature in India, and on the opposite variations of Density in the Higher and Lower Atmospheric Strata.* By H. F. BLANFORD, F. R. S., Meteorological Reporter to the Government of India.

(Abstract.)

The paper treated of two subjects, which had been incidentally discussed in the author's official Report on the Meteorology of India in 1879,

but which, being of general and not merely temporary interest, the author had thought desirable to recast as the subjects of a special paper for the Society.

The first of these was a discussion of the circumstances which mainly determine those marked variations of temperature, that characterize the corresponding seasons of different years in India. Adverting to a paper recently communicated to 'Nature' by Mr. Douglas Archibald, in which Mr. Archibald had shown some reasons for inferring that the cyclical variations of rock-temperature, brought to light by Prof. Piazzzi Smythe, were determined by corresponding cyclical variations of cloudiness in the atmosphere, the author remarked that this view was in part identical with that which he had originally suggested in a paper read before the Society in June 1875; wherein he had endeavoured to show that the temperature of the lower atmosphere on the land surface, in India, depends more on the quantity of cloud and rainfall, than on variations of the solar intensity. Evidence bearing on this subject, drawn from the meteorological observations of the last 6 years, was then brought forward. The temperature of the air and ground as observed at Calcutta in the first five months of 1879 was contrasted with the corresponding temperatures of 1880, and the difference shown to accompany marked variations in the cloud and rainfall. Similar evidence was obtained when the temperature of the N. W. Provinces in the hot months and rains respectively of the years 1877 and 1879 were compared, the variations of the two seasons being in opposite directions in the two years compared; and these were shown, in like manner, to have accompanied very striking variations in the cloud proportion and rainfall.

The action of the different agencies which most powerfully influence temperature at different seasons was discussed briefly, with the result that, only in November and December, is the effect of cloud to raise the temperature above the normal value. At all other seasons, the effect is the opposite, and hence abnormally cloudy and rainy years are abnormally cool years.

The second subject discussed was the variations in the density of the lower and higher strata of the atmosphere, as shown by a comparison of the barometric pressures at hill stations with those on the plains. It was shown that, in many cases, the density of the lower strata of the atmosphere was below the average, when the barometric pressure as a whole was in excess of the average, and *vice versa*; indicating that the higher strata must have an anomaly of the opposite character to that of the lower. It was also shown that a similar opposition of conditions is of annual recurrence at the setting in of the rains, and that it might therefore be probably traceable to some definite play of physical causes. Then adverting to a former discussion, in which it had been shown that the principal cause

affecting the density of the atmosphere is change of temperature, after referring to a recent paper by Mr. Douglas Archibald in the Journal of the Meteorological Society of London, in which this view had been revived and established, some additional evidence was adduced in its support; and it was finally pointed out that, while, as shown in the former part of this paper, the action of cloud and rain was to lower the temperature of the lower strata of the atmosphere, their effect on the higher strata would probably be of the opposite character, which would explain and reconcile the apparent barometric anomaly in question.

This paper will be published in the Journal, Part II.

2. *Description of a Raingauge with Evapometer for remote and secluded stations (with a Plate).*—By H. F. BLANFORD, F. R. S., *Meteorological Reporter to the Government of India.*

(Abstract.)

The paper described a raingauge, intended for use at stations at which there was no resident observer, and which could only be visited at intervals of a month or more; such as were certain hill-tops and stations in forest tracts. The idea had been suggested by Mr. Hutchins of the Mysore Forest Department in an official letter, which had been sent to the author for report. He had made some additions to the design sent up by Mr. Hutchins, and a gauge had been constructed in accordance with the modified design at the Mathematical Instrument Department, and had been subjected to a year's verification at the Alipore Observatory. The result of this verification was now communicated to the Society.

The gauge only differed from an ordinary raingauge in having a very large receiver, capable of holding about 30 inches of rainfall. The receiver was surrounded by an outer casing to diminish evaporation, and, in use, was buried in the ground, the mouth being about one foot above the ground level. Accompanying it, was a smaller vessel of the same diameter, but much shallower, and covered with a conical lid having a small perforation at the apex; which was protected by a small conical cap, to prevent the entrance of rain. This served as an evapometer. In use a measured quantity of water (say = 2 inches of rainfall) was placed in both vessels, and they were then left undisturbed for a month. At the end of that time, the quantity in each vessel was remeasured. The additional water in the gauge being added to the loss in the evapometer was assumed to be the total rainfall of the interval.

A year's verification at Alipore, where the rainfall was also measured daily, showed that the instrument was less accurate than had been hoped,

but was nevertheless calculated to give an approximate result when great accuracy was not important. It had been found that the evaporation from the evapometer exceeded that from the gauge by quantities varying from $\frac{1}{4}$ inch to $\frac{3}{4}$ inch in different months, and the total error in ten months amounted to $4\frac{1}{2}$ inches. The cause of the error being obvious, it appeared probable that it might be greatly reduced or even corrected by increasing the depth of the evapometer, and by enlarging the conical cap, which would diminish the evaporation.

This paper will be published in the Journal, Part II, with a Plate.

3. *On some Lepidopterous Insects belonging to the Rhopalocerous Genera Euripus and Penthema from India and Burmah.*—By J. WOOD-MASON, Deputy Superintendent, Indian Museum.

This paper will be published in the Journal, Part II, No. 2 for 1881.

4. *A list of Butterflies taken in Sikkim in October 1880 with notes on habits, &c.*—By LIONEL DE NICEVILLE.

This paper will be published in the Journal, Part II, No. 1 for 1881.

The following communication has been received—

On the Revenues of the Mughul Empire.—By H. G. KEENE, C. S.

LIBRARY.

The following additions have been made to the Library since the meeting held in March last.

TRANSACTIONS, PROCEEDINGS AND JOURNALS,

presented by the respective Societies and Editors.

Bombay. The Indian Antiquary,—Vol. X, Parts 116 and 117, March 1881.

Bordeaux. Société de Géographie Commerciale,—Bulletin, Nos. 3, 4 and 5.

Calcutta. Agricultural and Horticultural Society of India,—Journal, Vol. VI, Part 3.

Lennox, P. de Laval.—Remarks on Cattle disease in the district of Kangra, its treatment and remedy. Notes on the preparation of the Rhea Fibre, by certain residents of the Bhagulpore district. Communicated by the Government of Bengal. Sandys, T.—Remarks on Rhea cultivation and preparation. Poyson, Capt. J. F.—Notes on the introduction of certain Food Grains and Economic Plants into the Himalayas. Notes on some neglected Fibres. Trees yielding India Rubber.

- Leipzig. Deutsche Morgenländische Gesellschaft,—Zeitschrift, Vol. XXXIII, Part 4, 1880.
- Lille. Union Géographique du Nord de la France,—Bulletin, Nos. 1—5, July to November 1880.
- London. Royal Asiatic Society of Great Britain and Ireland,—Journal, Vol. XIII, Part 1, January 1881.
- . Statistical Society,—Journal, Vol. XLIII, Part 4, December 1880.
- . Royal Microscopical Society,—Journal, Vol. I, Part 1, February 1881.
- Summary of current Researches relating to Zoology and Botany (principally Invertebrata and Cryptogamia) Microscopy, &c., including original Communications from Fellows and others.
- . Royal Geographical Society,—Proceedings, Vol. III, Nos. 1—2.
- . Institution of Mechanical Engineers,—Proceedings, No. 4, 1880.
- . Royal Astronomical Society,—Monthly Notices, Vol. XLI, Nos. 2 and 3.
- . ———. Memoirs,—Vol. XLV, 1879-80.
- . Nature,—Vol. XXIII, Nos. 590, 592 and 593.
- . The Athenæum,—Nos. 2781—2785.
- . The Academy,—Nos. 457—462.
- Lyons. Société de Géographie,—Bulletin, Vol. III, No. 19.
- Manchester. Literary and Philosophical Society of Manchester,—Memoirs, Vol. VI.
- . ———. Proceedings, Vols. XVI, XVII, XVIII, and XIX.
- Moscow. Société Impériale des Naturalistes,—Bulletin, Vol. LV, No. 2, 1880.
- Sévertzow, Dr. N.—Études sur le passage des oiseaux dans l'Asie Centrale particulièrement par le Ferghânah et le Pamir.
- Paris. La Société de Géographie,—Bulletin, Vol. XX, December 1880.
- Pisa. Società Toscana di Scienze Naturali,—Atti, Processi Verbali, 9th January 1881.
- Rome. Società degli Spettroscopisti Italiani,—Memorie, Dispensa 10—11, October und November 1880.
- Schaffhausen. La Société Entomologique Suisse,—Bulletin, Vol. 2, No. 2.
- Simla. United Service Institution of India,—Journal, Vol. IX, No. 46, 1880.
- St. Petersburg. Russian Geographical Society,—Proceedings, 1879.
- . L'Académie Impériale des Sciences de St. Petersbourg,—Bulletin, Vol. XXVI, No. 2.
- Martens, E. F.—Mollusques recueillis en Arménie par M. Alexandre Brandt.
- . ———. Memoires,—Vol. XXVII, Nos. 5—12.
- No. 5. Møller, Valerian V.—Die Foraminiferen des Russischen Kohlenkalks.
- No. 7. Schrenck, Dr. Leop. V.—Der Erste Fund einer Leiche Von Rhinoceros Merckii Jaeg.

No. 8. *Bunge, Al.*—Pflanzen-geographische betrachtungen über die Familie der Chenopodiaceen.

No. 10. *Heer, Dr. O.*—Nachträge zur Jura-Flora Sibiriens gegründet auf die von Herrn Richard Maak in Ust-Baloi gesammelten Pflanzen.

No. 12. *Abich, H.*—Ein Cyclos Fundamental der Barometrischer Höhenbestimmungen auf dem Armenischen Hochlande.

Vienna. Kaiserliche Akademie der Wissenschaften, Archiv für österreichische Geschichte,—Vol. XL, Part 2; Vol. XLI, Parts 1—2; and Vol. XLII, Part 1.

———. ———. Sitzungsberichte, — Philosophisch-historische Classe, Nos. 2 and 3, Vol. XCVI.

———. ———. Sitzungsberichte,—Mathematisch-Naturwissenschaftliche Classe, Part I, Vol. LXXXI, Nos. 1—5; Vol. LXXXII, Nos. 1—2: Part II, Vol. LXXXI, Nos. 4—5; Vol. LXXXII, Nos. 1—2: Part III, Vol. LXXXI, Nos. 4—5; Vol. LXXXII, Nos. 1—2.

Vol. LXXXI, Pt. I, Nos. 1-4. *Fuchs*.—Ueber einige tertiäre Echiniden aus Persien.

———. Pt. I, No. 5. *Touta*.—Geologische Untersuchungen im westlichen Theile des Balkan und in den angrenzenden Gebieten.

Vol. LXXXII, Pt. I, No. 1. *Sieber*.—Zur Kenntniss der nordböhmisches Braunkohlenflora.

———. Pt. I, No. 2. *Steindachner*.—Ueber eine neue Pythonart (Python Breitensteini) aus Borneo.

Vol. LXXXII, Pt. III, Nos. 1-2. *Langer*.—Die Foramina Thebesii im Horzen des Menschen.

Vienna. Kaiserliche Akademie der Wissenschaften,—Sitzungsberichte, Mathematisch-naturwissenschaftliche Classe, Register, zu den Banden 76 Bis 80.

———. ———. Denkschriften,—Mathematisch-naturwissenschaftliche Classe, Vols. XL and XLII.

Vol. XLII. *Hoernes*.—Materialien zu einer Monographie der Gattung Megalodus mit besonderer Berücksichtigung der mesozoischen Formen.

Almanach 1880.

BOOKS AND PAMPHLETS,

presented by the Authors.

CEBNUSCHI, H. Bi-Metallism at 15½ a necessity for the Continent, for the United States, for England, 8vo., London, 1881. Pam.

LEITNER, DR. G. W. A detailed Analysis of Abdul Ghafur's Dictionary of the Terms used by Criminal Tribes in the Panjab. Fcp., Lahore, 1880.

———. A sketch of the Changars and of their Dialect. Fcp., Lahore, 1880.

MISCELLANEOUS PRESENTATIONS.

Proceedings of the Californian Academy of Sciences at a Reception given to the Capt. and Officers of the U. S. Steamer "Thomas Corwin" and Captains of the Pacific Whaling Fleet on their return from the Arctic. 8vo San Francisco, 1880.

PERCE, H. A. Early discoveries of the Hawaiian Islands in the North Pacific Ocean. 8vo., San Francisco, 1880.

CALIFORNIAN ACADEMY.

MITRA, TROILOKYANATH. Tagore Law Lectures, 1879. The Law Relating to the Hindu Widow. 8vo, Calcutta, 1881.

THE CALCUTTA UNIVERSITY.

Report on Municipal Taxation and Expenditure in the Lower Provinces of Bengal, for the year 1879-80. Fcp., Calcutta, 1880.

WARDLE, T. The Wild Silks of India, principally Tusser. Fcp., London, 1880.

BENGAL GOVERNMENT.

BURNELL, A. C. A classified Index to the Sanskrit MSS. in the Palace at Tanjore. 4to., London, 1880.

MADRAS GOVERNMENT.

Société de Géographie. Rapport Annuel, Séance Solennelle, 23rd December 1880. 8vo., Lyons, 1881.

GEOGRAPHICAL SOCIETY OF LYONS.

Report on the Judicial Administration (Civil) of the Central Provinces for the year 1880. Fcp., Nagpur, 1881.

CHIEF COMMISSIONER, CENTRAL PROVINCES.

Records of the Geological Survey of India, Vol. XIV, Part 1, 1881. 8vo.
The Indian Antiquary, Vol. X, Parts 116 and 117, March 1881. 4to., Bombay, 1881.

HOERNLE, DR A. F. R. A comparative Grammar of the Gaudian Languages, with special reference to the Eastern Hindi. 8vo., London, 1880.

HOME, REVENUE, AND AGRICULTURAL DEPARTMENT.

Deutsche Litteratur Zeitung, Nos. 5 and 6, of 1880 4to., Berlin, 1880.

HINCKS, REV. DR On the Khorsabad Inscriptions (from Transactions, Royal Irish Academy). 4to., Dublin, 1850.

DR. A. F. R. HOERNLE.

HAGGERSTON, W. J. Newcastle-upon-Tyne, Public Libraries. Catalogue of the Books in the Central Lending Department. 8vo., Newcastle-upon-Tyne, 1880.

_____. Newcastle-upon Tyne, Public Libraries. Catalogue of the Books in the Juvenile Lending Department. 8vo., Newcastle-upon-Tyne, 1880.

NEWCASTLE PUBLIC LIBRARIES.

PERIODICALS PURCHASED.

Benares. Fallon's new English-Hindustani Dictionary, Part 2, March 1881.

Berlin. Journal für reine und angewandte Mathematik,—Vol. XC, Nos. 3—4.

Calcutta. Indian Medical Gazette,—Vol. XVI, Nos. 2 and 3, February and March 1880.

Göttingen. Gelehrte Anzeigen,—Nos. 5—11.

———. Nachrichten,—Nos. 2—5.

Leipzig. Annalen der Physik und Chemie,—Vol. XII, Part 2.

———. Beiblätter,—Vol. V, No. 2.

London. Quarterly Review,—Vol. CLI, No. 301, January 1881.

———. Westminster Review,—Vol. CXV, No. 227, January 1881.

———. Edinburgh Review,—Vol. CLIII, No. 313, January 1881.

———. Publishers' Circular,—Vol. XLIV, Nos. 1042—1043.

———. Nineteenth Century,—Vol. IX, Nos. 47—48.

———. Messenger of Mathematics,—Vol. X, Nos. 8—9.

———. Quarterly Journal of Pure and Applied Mathematics,—Vol. XVII, No. 67.

———. Mind,—No. 21, January 1881.

———. Quarterly Journal of Microscopical Science,—Vol. XXI, No. 81.

Brady, H. B.—Notes on some Reticularian Rhizopoda of the "Challenger" Expedition. *Dowdeswell, G. F.*—On some appearances of red blood-corpuscles of Man and other Vertebrata.

———. Journal of Science,—Vol. III, Nos. 85—86.

———. American Journal of Science,—Vol. XX, No. 120.

———. Ibis,—Vol. V, No. 17.

Forbes, W. A.—On the Contributions to the Anatomy and classification of Birds made by the late Professor Garrod. *Ramsay, Capt. R. G. W.*—Description of two new species of Birds. *Biddulph, Maj. J.*—On the Birds of Gilgit. *Shelly, Capt. G.*—On new species of East African Birds. *Gurney, J. H.*—A List of Birds collected at or near Mombasa, East Africa. *Layard, E. L.* and *Layard, E. L. C.*—Notes on the Avifauna of New Caledonia and the New Hebrides. *Nicholson, F.* List of Birds collected by Mr. H. O. Forbes in the Island of Java.

———. Journal of Botany,—Vol. X, Nos. 217—218.

No. 217. *Agardh, J. G.*—Species, Genera et ordines Algarum, seu descriptiones succinctæ specierum, generum, et ordinum quibus Algarum regnum constituitur. *Kuntze, Dr. Otto.*—Ueber Geysirs und nebenan entstehende verkielte Bäume.

No. 218. *Hance, H. F.*—A new Hong Kong Melastomaceæ.

———. Annals and Magazine of Natural History,—Vol. VII, Nos. 37—38.

No. 37. *Lütken, Dr. C. F.*—Spolia Atlantica: Contributions to the knowledge of the changes of Form in Fishes during their growth and Development, especially in the Pelagic Fishes of the Atlantic. *Thomas, O.*—Description of

- a new species of *Mus* from Southern India. *Butler, A. G.*—Description of new species of Lepidoptera in the collection of the British Museum. *Miers, E. J.*—On a small collection of Crustacea and Pycnogondia from Franz-Josef Land, collected by B. Leigh Smith. *Günther, A. C. L. G.*—An Introduction to the Study of Fishes. *Wood-Mason, J.*—On a new species of *Papilio* from South India, with remarks on the Species allied thereto.
- . No. 38. *Butler, A. G.*—On a collection of Butterflies from Nikko, Central Japan. *Blanford, W. T.*—Note on a Central Asiatic Field-Mouse (*Mus arianus*).
- London. London Edinburgh and Dublin Philosophical Magazine,—Vol. XI, Nos. 65—66.
- . The Entomologist,—Vol. XIV, Nos. 212—213.
- No. 212. *Gooch, W. D.*—Notes on the Lepidoptera of Natal. *Fitch, E. A.*—The Mangold-fly.
- . The Entomologist's Monthly Magazine,—Vol. XVII, Nos. 200—201.
- No. 200. *Meyrick, E.*—Australian gall-making Lepidopterous larvae. *Sharp, D.*—Reviews: Avis préliminaire d'une nouvelle classification de *Dytiscidae*. *Edwards, W. H.*—The Butterflies of North America, second series, pt. 9.
- No. 201. Notes on *Cucujidae* in Japan, with diagnosis of a new Species. *Lewis, G.*—Notes from Japan. Observations on *Vanessa* in Japan.
- . Society of Arts,—Journal, Vol. XXIX, Nos. 1472—1477.
- . Chemical News,—Vol. XLIII, Nos. 1107—1111.
- Paris. Annales de Chimie et de Physique,—Vol. XXII, January and February 1881.
- . Revue et Magasin de Zoologie,—Vol. VII, Part 2, 1879.
- Fieber, F. X.*—Les Cicadines d'Europe, traduit par F. Roiber. *Thomson, J.*—Revue du groupe des Psilapterites. *Fairmaire, L.*—Coléoptères du nord de l'Afrique.
- . Revue de Linguistique,—Vol. XIV, Pt. 1, 15th January 1881.
- . Journal Asiatique,—Vol. XVI, No. 3, and Vol. XVII, No. 1.
- . Journal des Savants,—February 1881.
- . Comptes Rendus,—Vol. XCII, Nos. 6—9.
- . Revue Scientifique,—Vol. XXVII, Nos. 6—11.
- . Revue Critique,—Vol. XI, Nos. 6—10.
- . Revue des deux Mondes,—Vol. XLIII, 15th February 1881, and Vol. XLIV, 1st March 1881.
- Philadelphia. Manual of Conchology, Part 9.

BOOKS PURCHASED.

- ANDERSON, R. Lightning Conductors, their History, Nature and Mode of Application. Roy. 8vo., London, 1880.
- BALFOUR, F. M. A Treatise on Comparative Embryology, Vol. I, 8vo. London, 1880.

BANES, J. F. *Index Geographicus Indicus*. 4to., Calcutta, 1881.

BENTLEY, R. and TRIMEN, H. *Medical Plants, being Descriptions with original Figures of the Principal Plants employed in Medicine and an account of their Properties and Uses*. Parts 12—42 (incl.). 4to., London, 1876-1880.

BRUGSCH-BEY, DR. H. *A History of Egypt under the Pharaohs derived entirely from the monuments, to which is added a discourse on the Exodus of the Israelites*. Translated and Edited from the German by Philip Smith, B. A. 2 Vols. 8vo., London, 1881.

———. *Hieroglyphisch-demotisches Wörterburch enthaltend in wissenschaftlicher Anordnung und Folge den Wortschatz der heiligen und der Volks-sprache und Schrift der alten Aegypter*, Vol. V. 4to., Leipzig, 1880.

BUDGE, E. A. *Archaic Classics. Assyrian Texts, being Extracts from the Annals of Shalmaneser II, Sennacherib and Assur-banipal, with Philological Notes*. 4to., London, 1880.

CLAUSIUS, R. *The Mechanical Theory of Heat*. Translated by W. R. Browne, M. A. 8vo., London, 1879.

CLIFFORD, W. R. *Lectures and Essays*, edited by Leslie Stephen and Frederic Pollock. Vols. I and II, 8vo., London, 1879.

DAWKINS, W. B. *Early man in Britain and his place in the Tertiary Period*. 8vo., London, 1880.

DUTT, SHOSHEE CHUNDER. *India, Past and Present; with Minor Essays on Cognate subjects*. 8vo., London, 1880.

EDKINS, REV. J. *Chinese Buddhism: A Volume of Sketches, Historical, Descriptive and Critical*. 8vo., London, 1880.

EGGELING, J. *Sanskrit Text Society. Vardhamāna's Ganaratna-Mahodahi, with the author's Commentary, Part I*, 8vo., London, 1879.

FABER, REV. E. *Introduction to the Chinese Religion. A Critique of Max Müller and other authors*. 8vo., Hong-Kong.

GAMGEE, A. *A Text Book of the Physiological Chemistry of the Animal Body*, Vol. I. 8vo., London, 1880.

HOUGH, J. C. and LANCASTER, A. *Bibliographie Générale de l'Astronomie ou Catalogue Méthodique des Ouvrages, des Mémoires et des Observations Astronomiques publiés depuis l'origine de l'imprimerie jusqu'en 1880*. Vol. II, fasc. 1. Roy. 8vo., Brussels, 1880.

HOWORTH, H. H. *History of the Mongols from the 9th to the 19th Century, Part II, Divisions 1 and 2*. Roy. 8vo., London, 1880.

KEANE, A. H. *Monograph on the Relations of the Indo-Chinese and Inter-Oceanic Races and Languages*. 8vo., London, 1880.

LEGG, J. *The Religions of China. Confucianism and Taoism described and compared with Christianity*. 8vo., London, 1880.

- MAXWELL, J. C.** *The Electrical Researches of the Honourable Henry Cavendish, F. R. S. written between 1771 and 1781; Edited from the original MSS. in the possession of the Duke of Devonshire, K. G.* 8vo. Cambridge, 1879.
- MÜLLER, F. MAX.** *Sacred Books of the East, Vols. IV, V and VII,* 8vo., Oxford, 1880.
- OPPERT, DR. G.** *On the Weapons, Army Organisation, and Political Maxims of the ancient Hindus, with special reference to Gunpowder and Firearms.* 8vo, Madras, 1880.
- RENAN, E.** *The Hibbert Lectures, 1880. Lectures on the Influence of the Institutions, Thought, and Culture of Rome, on Christianity and the Development of the Catholic Church.* 8vo, London, 1880.
- RENOTT, P. C. P.** *The Hibbert Lectures, 1879. Lectures on the Origin and Growth of Religion as illustrated by the Religion of Ancient Egypt.* 8vo., London, 1880.
- ROSCOE, H. E. and SCHORLEMMER, C.** *A Treatise on Chemistry, Vol. I and Vol. II, Parts 1 and 2.* 8vo., London, 1878-80
- SACHAU, DR. C. E.** *The Chronology of Ancient Nations (of Albiruni). Translated and Edited.* Roy 8vo., London, 1879.
- SAYCE, A. H.** *Introduction to the Science of Language. Vols. I and II.* 8vo, London, 1880.
- SCHOMANN, G. F.** *The antiquities of Greece. Translated by E. G. Hardy and J. S. Mann.* 8vo., London, 1880.
- SEMPER, KARL.** *The Natural Conditions of Existence as they affect Animal Life.* 12mo, London, 1881.
- SLEEMAN, C. W.** *Torpedoes and Torpedo Warfare containing a complete and concise account of the Rise and Progress of Submarine Warfare; also a detailed description of all matters appertaining thereto, including the latest Improvements.* Roy. 8vo., Portsmouth, 1880.
- SPENCER, H.** *Descriptive Sociology; or Groups of Sociological Facts, classified and arranged. Hebrews and Phœnicians, by R. Scheppig, Ph. D.* Fol., London, 1880.
- STENZLER, F.** *Sanskrit Text Society. The Institutes of Goutama, edited with an Index of Words* 8vo., London, 1876.
- STOKES, MAIVE.** *Indian Fairy Tales. Collected and Translated.* 8vo., London, 1880.
- TRENCKNER, V.** *The Milindapañho: being Dialogues between King Milinda and the Buddhist sage Nāgasena Edited.* 8vo., London, 1880.
- . *Pali Miscellany, Part I,* 8vo., London, 1879.

PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL.
FOR MAY, 1881.

The Monthly General Meeting of the Asiatic Society of Bengal was held on Wednesday, the 4th of May 1881, at 9. 15 p. m.

The Hon. H. J. REYNOLDS, C. S., Vice-President, in the Chair.

The minutes of the last Meeting were read and confirmed.

The following presentations were announced—

1. From the Lisbon Geographical Society,—(1) *Mozambique*, by J. J. Machado, (2) *Explorações Geologicas e mineiras nas Colonias Portuguezas*, by L. Malheiro.

2. From the Department of the Interior, U. S.—Annual Report of the U. S. Geological and Geographical Survey of the Territories for the year 1877.

3. From the Meteorological Reporter to the Govt. of India—*Description et notices sur l' installation et l'entretien des Météorographes Graveurs de von Rysselberghe et Schubart, construits pour compte du Ministère des Indes Britanniques*, by Th. Schubart.

4. From the authors,—(1) *Notice sur une collection de Monnaies Orientales de M. le Comte S. Stroganoff*, by Prof. W. de Tiesenhhausen, (2) *The Tea Cyclopædia*, by F. Wyman, editor of the *Indian Tea Gazette*.

5. From the Home, Revenue and Agricultural Department,—*Selections from the Records of the Government of India, Home, Revenue and Agricultural Department*, No. 174.

6. From the Museo Publico of Buenos Aires,—(1) *Bericht über die Feier des 50 Jahrgigen Doctor Jubilæums des Prof. Dr. Hermann Burmeister begangen der 19th December 1879 in Buenos Aires*, (2) *Description Physique de la République Argentine*, Vol. III, and *Atlas Part 2*, by Dr. H. Burmeister.

7. From the Royal Society of New South Wales,—Report of the Council of Education of New South Wales for 1879, (2) Annual Reports of the Department of Mines, New South Wales, for 1878 and 1879.

8. From Dr. A. F. R. Hoernle,—*Bibliotheca Orientalis* for 1877, by R. Frédérici.

The following Gentlemen, duly proposed and seconded at the last meeting, were balloted for and elected Ordinary Members of the Society :

J. Cockburn, Esq.

Major E. Molloy.

The COUNCIL reported that Mr. V. Ball had been asked to officiate as Natural History Secretary during Mr. J. Wood-Mason's absence on deputation.

The COUNCIL also reported that Mr. Alexander Pedler had resigned the post of Honorary Secretary and Member of Council and that Dr. H. W. McCann had been appointed in his place.

The COUNCIL also reported that Mr. Pedler had resigned the post of Trustee of the Indian Museum on behalf of the Society and that Mr. J. Eliot had been elected a Trustee.

The SECRETARY reported that Babu Mahendra Chandra Mukhopadhyaya had been appointed as a temporary copyist in the office on Rs. 15 per mensem.

The SECRETARY read the names of the following Gentlemen appointed by the Council to serve on the several Committees during the year 1881.

FINANCE COMMITTEE.

Dr. Rájendralála Mitra, C. I. E.

J. Westland, Esq., C. S.

H. B. Medlicott, Esq., F. R. S.

H. Beverley, Esq., C. S.

J. Eliot, Esq., M. A.

LIBRARY COMMITTEE.

Dr. Rájendralála Mitra, C. I. E.

H. B. Medlicott, Esq., F. R. S.

Col. J. F. Tennant, R. E., F. R. S.

Dr. D. D. Cunningham.

C. H. Tawney, Esq., M. A.

Babu Praunath Pundit, M. A.

H. F. Blanford, Esq., F. R. S.

Dr. O. Feistmantel.

J. Eliot, Esq., M. A.
 H. Beverley, Esq., C. S.
 Dr. Mohendralal Sircar.
 Babu Pratapa Ch. Ghosha, B. A.

PHILOLOGICAL COMMITTEE.

Dr. Rájendralála Mitra, C. I. E.
 C. H. Tawney, Esq., M. A.
 Major-General A. Cunningham, C. S. I.
 J. Beames, Esq., B. C. S.
 F. S. Grovse, Esq., M. A., C. S.
 Rev. K. M. Banerjea, LL. D.
 Dr. Mohendralála Sircar.
 Dr. G. Thibaut.
 Hon'ble Whitley Stokes, C. S. I., C. I. E.
 C. J. Lyall, Esq., B. A., C. S.
 G. A. Grierson, Esq., C. S.
 H. Rivett-Carnac, Esq., C. S., C. I. E.
 Nawab Abdul Latif, Khan Bahadur.
 Moulvie Kabiruddin Ahmed.
 Babu Dijendranath Thakur.
 Babu Prannath Pandit, M. A.
 Babu Protapa Ch. Ghosha, B. A.
 Major H. S. Jarrett, S. C.

NATURAL HISTORY COMMITTEE.

Dr. O. Feistmantel.
 A. O. Hume, Esq., C. S.
 G. Nevill, Esq., C. M. Z. S.
 Dr. D. D. Cunningham.
 Dr. G. King, F. L. S.
 Dr. D. Brandis, F. L. S., F. R. S.
 S. E. Peal, Esq.
 R. Lydekker, Esq., B. A.
 Capt. G. F. L. Marshall, B. E.
 L. Schwendler, Esq.
 Dr. T. R. Lewis.

PHYSICAL SCIENCE COMMITTEE.

H. B. Medlicott, Esq., F. R. S.
 Major-General J. T. Walker, R. E., F. R. S.
 H. F. Blanford, Esq., F. R. S.
 A. J. L. Cappel, Esq.

J. Eliot, Esq., M. A.

Col. J. F. Tennant, R. E., F. R. S.

Commander A. D. Taylor.

L. Schwendler, Esq.

F. Pedden, Esq.

COINS COMMITTEE.

Dr. Rájendrakála Mitra, C. I. E.

Col. J. F. Tennant, R. E., F. R. S.

Major-General A. Cunningham, C. S. I.

H. Rivett-Carnac, Esq., C. S., C. I. E.

Hon'ble J. Gibbs, C. S. I., C. I. E.

C. H. Tawney, Esq., M. A.

Major W. F. Prideaux, S. C.

The SECRETARY read the following table of predictions for Northern India for the Eclipse of the sun May 16th, 17th, 1882, sent by Col. J. F. Tennant, F. R. S.

ECLIPSE OF THE SUN, MAY 16, 17, 1882.

PREDICTIONS FOR NORTHERN INDIA.

Places.	COMMENCEMENT.		GREATEST ECLIPSE.		END.	
	Mean Time.	Position.	Mean Time.	Magni- tude.	Mean Time.	Position.
	h. m.		h. m.	Digits.	h. m.	
Allahabad	0 „ 24.1	121° R.	1 „ 54.8	6.314	2 „ 15.3	14° R.
Calcutta	1 „ 11.9	142 R.	2 „ 38.8	5.780	3 „ 50.7	20 R.
Delhi	23 „ 18.0	72 R.	1 „ 22.6	7.800	2 „ 49.4	5 R.
Jubbulpore	0 „ 13.2	119 R.	1 „ 42.1	5.687	3 „ 02.8	24 R.
Kurrachee	22 „ 37.1	9 R.	0 „ 08.8	6.730	1 „ 41.1	19 R.
Lahore	23 „ 28.3	61 R.	1 „ 03.0	8.878	2 „ 32.0	4 R.
Lucknow	0 „ 15.6	109 R.	1 „ 47.9	7.151	3 „ 00.5	10 R.
Mooltan	23 „ 07.3	39 R.	0 „ 46.8	7.040	2 „ 14.1	4 R.
Mussooree	23 „ 53.5	82 R.	1 „ 27.4	8.480	2 „ 54.5	1 L.
Patna	0 „ 47.0	133 R.	2 „ 16.0	6.786	3 „ 34.6	12 R.
Peshawar	23 „ 09.7	62 R.	0 „ 44.4	10.136	2 „ 15.9	16 L.
Shillong	1 „ 33.1	142 R.	2 „ 57.8	7.146	4 „ 11.2	8 R.
Sindia	23 „ 46.6	78 R.	1 „ 21.7	8.740	2 „ 48.7	3 L.

N. B.—Positions are measured on the circumference of the Sun and to the Right or Left of the Highest point.

Dr. HOERNLE exhibited a collection of relics which had lately been found by Mr. Beglar in the course of an excavation carried on in the Great Temple of Buddha Gaya. Permission to exhibit them to the Society had been re-

ceived from the Lieutenant-Governor, shortly before the meeting ; and Dr. Hoernle explained that he was not in a position to give more information about them than what he had been able to gather in a short conversation with Mr. Wickes from whom he had received the relics. They were said to have been found in the Great Temple at a spot where according to local tradition the throne of Aśoka once stood, after digging to a depth of about 20 feet. They consisted of fragments of various kind of gems, corals, gold and silver foil, small pearls, &c. A very large number of them were perforated, showing apparently that they were originally strung on threads. Dr. Hoernle added, that it appeared to him that the theory of their connexion with Aśoka's throne required a great deal of confirmation ; and that it would be well to wait for General Cunningham's report, to whom, he understood, the relics had been already submitted, before accepting the local tradition.

Mr. Ball, who had examined the relics, concurred with Dr. Hoernle as to the doubtfulness of their connection with any throne of Aśoka. The result of his examination, as communicated in a letter after the meeting, is as follows :

"The collection includes sapphires, (whole and broken), rubies, emeralds (broken), pearls, coral, cornelian, garnet, quartz crystals, lapis lazuli, &c. There are also some heart-shaped pieces of emerald-like glass which have become encrusted over from lying in the soil.

"There are at least two specimens, one large, of a rare mineral called Iolite or Dichroite. These have been identified by Mr. Mallet to whom I shewed them. They at first sight look like sapphires.

"The larger one would be a valued specimen in our mineralogical collection if it could be obtained.

"The smashing of the sapphires into small pieces is remarkable. There are a few, however, which are intact."

Mr. WESTLAND exhibited four old maps of Calcutta and Bengal which he explained had been lithographed for issue with Mr. Sandeman's continuation of Mr. Seton-Karr's extracts from old Calcutta Gazettes. Mr. Sandeman had left them behind him, in his, now Mr. Westland's, office, and Mr. Westland thought he would best dispose of them if he offered them to such members of the Society as had any interest in the subject.

The first was a map of the Sunderbuns in 1721, apparently a rough sketch by some Dutch skipper. It had been occasionally referred to as evidence of the extension of cultivation in these regions ; but some difficulties had been found in identifying some of the settlements named in it. One of them called "Cuipitavai" he identified as "Khalifatabad" the pergunna in which Baghat was situate, near which there were some ancient and large buildings, indicating an early cultivating settlement. "Noldy" farther east

ἐξ Ἐπίβρου δέοντα κύνα στυγερού Ἄϊδαο. (θ 368).

In the *Odyssey* (XI, 626) the subject is referred to when Héraklés tells Odysseus that his sufferings are but a reflection of the toils which Héraklés himself had undergone.

“Of all which one was, to descend this strand
And hale the dog from thence. He could not think
An act that danger could make deeper sink,
And yet this depth I drew, and fetch’d as high,
As this was low, the dog.”

(*Chapman's translation.*)

In neither place the name of the dog is given; but Hesiod (III, 11) calls him Kerberos, and assigns him fifty heads. Apollodoros, Euripides and Virgil reduce the number of heads to three; while some poets prefer to call the animal “many-headed” or “hundred-headed” (Horat. *Carm.* II, 13, 34. Tzetz. *Lycoph.* VI, 78. Seinec. *Herc. fur.* 784). Apollodoros says that the tail of this animal was formed by a serpent, and the mane by a number of snakes of various kinds. It was begotten by Typhon and Echidna. Hesiod describes another dog of the same parentage, and assigns him to Geryones (293). Thus the Greeks had two dogs, the counterparts of the Vedic Saramayau. Orthros was the shepherd dog which Héraklés destroyed, and was frightful enough to be reckoned a monster whose destruction would reflect credit on the great hero: the feat represents his eighth labour. This dog is the counterpart of the Vipra of the Vedic legend. He did not, however, attain to any distinction, and was soon forgotten. Kerberos, on the other hand, played a prominent part in Hellenic mythology. As the three-headed monster watching the gate of Hades, it was very much dreaded, and as a dog, like every other dog, was detested by the Greeks.

The belief was that he did no harm to those who entered the mansion of Pluto, but tore up those who attempted to escape from it. This is, however, not in keeping with the legend which says that he growled fiercely when Orpheus was entering the portals of Hades, and had to be lulled by the enchanting music of that gifted harper. One of the greatest feats of Héraklés was the dragging out of the monster from his nook, and this could not be effected without the assistance of such divine personages as Athéné and Hermés.

The three heads of the animal were not peculiarly its own, for Hermés had the same number of heads, whence his name ‘Trikephalos,’ and so had Hekaté ‘triformis.’ According to Bryant the meaning of Kerberos is “darkness” (ἐρεβος)—the darkness of Hades or of night, the Sanskrit equivalent being *Sarvara* or *Sambara*, night slain by Indra.

In Norse legends—as in Baldur's Dream in the elder Edda—the animal is described as “spotted with blood on his front and chest.”

In the Vendidad it finds a prominent place; nor was it unknown among some of the Turanian and Semitic nations.

The belief in it turns up, curiously enough, among Algonquin tribes of the North American Indians, who say that at the further approach of the snake bridge across the river of the dead there is a warder in the form of a great dog.*

Local colouring and minor details apart, the myth is the same everywhere, and its wide dispersion bespeaks its extreme antiquity.

But what it means has not yet been satisfactorily settled. According to some Kerberos is a symbol of all-devouring time, and the three mouths of the animal represent the present, the past, and the future. Milton accepted it in the sense of man's conscience, which preyed within him for his past misdeeds. Others believed it to be the symbol of earth, or of the human passions, the victory of Héraklés denoting the conquest which he achieved over his passions. Bryant takes Kerberos to be the name of a place—and it signified the temple of the sun, deriving it from *Kir-abor* “the place of light.” The temple was also called *Tor-caph-el*, which, it is alleged, changed to Trikephalos.

The latest theory is that it is an offshoot of the far-reaching solar myth which peopled the eastern and the western heavens with such an endless variety of gods and goddesses. According to this theory, the gloom of the morning and the evening represents the two dogs. (Max Müller, ‘Science of Language,’ Second Series, p. 478.) The learning, ingenuity and tact with which this theory has been worked out leaves little to be desired. Philological evidence on the subject is overwhelming, and the coincidences are most remarkable. And yet the enquiry does not seem to be complete. The myth of Kerberos may be due to Saramá = Echidna, the prolific mother of so many romantic stories; but the question remains why was the story elaborated? and what gave occasion to its repulsive character? The Dawn is justly associated with every thing that is charming and full of life; why should it be brought into contact with death and destruction? Divested of its mythological surroundings, the substance of the story is made up of the presence of dogs at the time of transition from life to eternity; this is ill explained by the melting of the gloom of night by the appearance of Dawn. The dog is made the son of Dawn, or darkness proceeding from light, and not light proceeding from darkness. Solar influence moreover always typifies exuberant vivification, and not death. It is by itself quite inexplicable why the glorious and resplendent Dawn should bring forth two ugly puppies. If we take man's life to be the counterpart of the life of the

* Tanner's Narrative, p. 290; Schoolcraft, Indian Tribes, III, 233.

sun, in dawning beauty, in midday glory, in evening death, and the myth of the sunset to represent the close of life, the dogs could scarcely be called the sons of Dawn, for they would come with the gloaming, and not with the rising sun. It may be said that the word U'shâ = Dawn is used for all the three stages of the sun's course, and the succession of the night to the resplendence of the setting sun is what is meant by the affiliation; but neither Saramâ, nor Hermés, nor Echidna, is associated with the gloaming. I am disposed to think, therefore, that the solar theory is not by itself sufficient to solve the question. There was something else—something gross and material—in the life of the ancient Aryans which gave rise to the story, and which was subsequently associated with the current solar mythology. And this something I fancy was connected with the funeral rites of the time.

In the most primitive state of human society the simplest and most convenient mode of disposing of the dead was to fling it into the nearest jungle or wild place, either to rot there, or to be eaten up by wild animals. Carrion birds, jackals, foxes and dogs were the animals which were attracted by such castings, and dogs, which had been domesticated at a very early age, were necessarily associated with the disposal of the dead. In this plan of funeral the element of chance predominated, for it was quite uncertain when the destruction would be completed by stray animals. To obviate this uncertainty, the most primitive form of funeral was, it would seem, at one time so far modified as to facilitate the consumption of the dead in a short time by enticing wild dogs, or employing domestic dogs, for the purpose. Such an expedient would not be by any means extraordinary. In the present day the Pársis carry vultures to such places where there are none, in order that they may be ready at hand to consume the dead in their Towers of Silence. Such enticement or employment of dogs often repeated would consolidate into a tribal or national custom, and the cutting up of the corpse to facilitate rapid consumption would be an innovation that would be easily introduced.

That such a horrible form of funeral did obtain, and still obtains, in some places is unquestionable. According to Herodotus (Lib. I) "the body of a male Persian is never buried until it has been torn either by a dog or a bird of prey. That the Magi have this custom is beyond a doubt, for they practice it without any concealment". (Rawlinson's Herodotus I, 140 §). We have the authority of Strabo (Lib. XV) to show that the practice of exposing corpses to be devoured by dogs was current among the Sogdians and the Bactrians, who on this account named their dogs "buriers." Cicero noticed the same among the Hyrcanians. He says—"In Hyrcania plebs publicos alit canes; optimates, domesticos. Nobile autem genus canum illud scimus esse. Sed pro sua quisque facultate

parat, a cuius lanietur: eamque optimam illi esse censent sepulturam." (Quart. Tuscul. Lib. I, 45.) The same custom also obtained among the Parthians, and Justin says "Sepultura vulgò aut avium aut canum laniatus est." (Lib. XLI, cap. 3.) Prejvalsky has seen it among the Northern Mongolians, where "the dead bodies, instead of being interred, are flung to the dogs and birds of prey. An awful impression is produced on the mind by such a place as this, littered with heaps of bones, through which packs of dogs prowl like ghosts to seek their daily repast of human flesh." (Mongolia. translated by E. D. Morgan, I, p. 14.) Horace della Penna, a Capuchin friar, found at Lhassa, in 1719, the practice of cutting up corpses to be given to dogs to be very common; and Abbé Huc found it among the Tibetans only a few years ago. At the last named place Huc noticed four different forms of sepulture, of which he says, "la quatrième, qui est la plus flatteuse de toutes, consiste à couper les cadavres par morceau et à les faire manger aux chiens. Cette dernière méthode est la plus courue". A reminiscence of this practice is still extant among the Pársis. Their funeral ritual requires that when a corpse is brought to the Dakhmá, or the place where it is to be given up to vultures, it should be first exhibited to one or more dogs, which, I noticed at Bombay, are kept there for the purpose. This ceremonial is called *Sagdíd*, and is strictly observed as it is enjoined in their scriptures. (Vendidad, Farg. VII, v. 3.) That this is a relic of the former detestable custom noticed by Herodotus is evident from the fact of the said scriptures enjoining the exposure of corpses on tops of hills that dogs and carrion birds may see and devour them (Vendidad Farg. VII, vv. 73, 74).

And since this detestable practice exists now, and did exist three thousand years ago and earlier, there is nothing very presumptuous in the supposition that it existed among the Aryans in their common home in central Asia, before their dispersion to Europe and India, between four and five thousand years ago. From these Aryans the Pársis have derived their custom of giving up their dead to be devoured by vultures, and exhibiting them to dogs, and from them has come the myth of dogs at the portal of death. •

If on the strength of these arguments it could be assumed that the custom of consigning corpses to dogs did at one time prevail among the Aryans, the details of the myth could be easily and very consistently explained. The idea of Eurytheus sending Héraklés to destroy a dog that did not exist on earth, and consequently did no harm to any body is a very fanciful, not to say an unmeaning, one. But if the above theory be accepted, it would follow that the story is a mythical representation of Héraklés having been the first to set about putting a stop to the barbarous practice of casting the dead to dogs, though the attempt did not prove

ultimately successful, for, according to the fable, Héraklés restored the dog to its place at the infernal gate. Not that Héraklés was an entity, for even Herodotus rejected some of his exploits on physical grounds, but the mythical embodiment of the good actions of man. Similarly the Orpheus myth would suggest the idea of the repugnance which men must have felt in allowing their loved ones (symbolised in the story in the person of Eurydiké) to be eaten up by such hateful animals, and of an attempt—an unsuccessful one again—to put down at custom. It might be that the myth of Orpheus belongs to the same class with that of Bacchus recovering his mother Semelé from Hades, and of Ulysseus, Odin and others visiting Hades, in which the original idea is of Hades being accessible to mortals under certain circumstances. The three or more heads of Kerberos may be accepted as implying plurality, or many-sided watchfulness, or both; and the quadruple eyes of the Vedic legend typify the same idea. The serpent's tail and the snaky mane of the dog would be the instruments with which corpses were cut up into small morsels. The association of Kerberos with the Dawn by making him the son of Dawn = Saramá = Echidna implies that the removal of the dead in primitive times was generally effected at early morn. It was so among the Greeks; it is still the case with the Persis and Tibetans. Ancient Hindus absolutely prohibited cremation at night, and in a verse of Yama, quoted in the Nirayasindhu, it is said, "Let not cremation, the first śráddha and travelling be performed at night or at dusk, for if done they would be fruitless."* This is not now strictly followed, and to provide for it, a later authority, the Skanda Purána, ordains that "should the cremation be commenced at night it should not be completed until day dawns, so that the offering of water and other rituals may be accomplished in daylight".† The idea was carried further by declaring death at night to be unwelcome. Thus in the Bhagavadgítá, "Should a person die in gloom, at night, during wane, or in course of the six months of the southern declension of the sun, he would go to the region of the moon, and then return to the earth, (but never attain salvation)".‡ Manu indirectly explains the

* सन्ध्यायां वा तथा रात्रौ दाहः पापेयकर्म च ।

नवमादह नो कुर्यात् अतं निष्कलतां व्रजेत् ॥

यमवचनं ।

† यदि रात्रौ दहेत् तस्य समाप्तिर्दहनस्य तु ।

परैश्चन्दुदिवे सूर्ये कार्यौ तस्योदकक्रिया ॥

स्कान्दवचनं ।

‡ धूमो रात्रिस्तथा कल्पाः वचनासा दक्षिणवचनं ।

तत्र चान्द्रमसं ज्योतिष्यौगी प्राप्य निवव्रजे ॥

मीतावचनं ।

object of the prohibition by saying that night is the time for sleep and day for work, and since the wane represents the night of the Pitris, and the southern course of the sun the night of the Devas, offerings at those times are not received by them. Most Smṛitikāras have quoted these verses as authorities.

With these elements at hand the construction of the myth would be perfectly intelligible, and the course of its development would be easily accounted for. That such was really the case it would be impossible in the present state of our information to assert with absolute certainty, but that the theory affords a natural and consistent solution of a very puzzling question, I am disposed to fancy, will be generally admitted. Were it otherwise, still there would be little to undo the explanation here attempted. It is not necessary to look for entire and absolute consistency in all the details of the story. Neither Hindu nor Greek Mythology was a system designed to be consistent in all its parts. The fables took their rise from various causes, under different circumstances, to elaborate particular facts or ideas, impressive sights or vivid impressions, play on words or poetical thoughts, and gradually they came to be digested, very crudely at best, as a system. Or, as Max Müller very aptly says, "there were myths before there was Mythology, and it is in this, their original and unsystematic prevalence, that we may hope to discover the genuine and primitive meaning of every myth". ("Chips" II, p. 147.) The question is, did the first germ of the story proceed from a very obtrusive fact, a funeral, which was afterwards worked out into a story, or a mere poetical idea, from the first start? and all I contend for is, that the former branch of the alternative appears more likely to be true than the latter.

Mr. Westland remarked on the fanciful nature of the two derivations given by the learned doctor, one of which would make Kerberos mean "The darkness of Erebus" and the other "the temple of Light". He objected to Hercules, himself a solar myth, being clothed with flesh and made to appear as an actual reformer of funeral customs. He also pointed out that whether the solar-myth theory was right or wrong, nothing in the learned doctor's paper came in proof or in disproof of it; inasmuch as that paper was devoted to shewing the origin of the idea of the dog himself, whereas the Solar-myth theory only pretended to shew how the dog, having been originated, was clothed with certain attributes.

Dr. Mitra explained that the derivations were not his own, but obtained from leading authors, and that the mythical character of Hercules did not in any way affect the question at issue. The attempt was to resolve one or more myths into their primary elements and not to preserve their entity.

3. *An account of the excavation of a mound called Jowhri Di, near the village of Imadpur, in the Muzafferpore District.—*

By J. E. LINCKE, C. E.

(Abstract.)

The mound is some 100 feet square and some 10 feet high with a few very ancient peepul trees growing on it. A drift which was run from the st at the level of the natural ground into the mound brought to light a all, 4 feet deep and 4 feet broad, and beyond it a flooring of bricks on a thin layer of sand. Similar drifts were made from other sides, with a similar result. Thus the three sides of a square fort were laid bare, with a sort of solid bastion at the south-west corner and a porch in the centre of the east wall. On the fourth side of the fort, no remains of a wall were discovered. Part of the brick flooring in the middle of the fort was removed and a well dug 4 feet deep, disclosing evidences in the shape of broken brick and pottery of the mound having been artificially made. Of the superstructure nothing certain is known. There is said to have been once a tower, three stories high. Tradition says that there was a fort and town of the Cherú Rája at this spot, long anterior to the Muhammadan conquest, and that the last Cherú Rája having been defeated in battle destroyed himself and his family and treasure with the castle which was burnt. Specimens of the antiquities found during the excavations were sent with the paper and exhibited to the meeting. They consisted of highly glazed pieces of broken pottery, remains of clay-toys or votive figures, clay spindle whorls (such as noticed by Mr. Rivett-Carnac, in the Journal of 1880), pieces of bone, etc. The last were identified as those of a turtle. Two brass figures of Vishnu and Ganeśa were also sent to be exhibited. They had been obtained by Mr. Lincke from a villager, who said he had dug them up in a field near the mound. The figures bear, at the foot, short inscriptions, the form of the letters of which shows that they are comparatively modern. The inscription on the figure of Krishna reads हरिनिवे० दे० धर्म abbreviated for हरिनिवेदन देय धर्म i. e., "a religious gift dedicated to Hari". That on the figure of Ganeśa is too badly cut to be clearly read, but the first word appears to be *Kanha* the name of the donor; the last two are *dēya dharmma* "a religious gift".

Specimens of the antiquities found in or near the mound were exhibited at the meeting.

This paper will be published in the Journal, Part I.

LIBRARY.

The following additions have been made to the Library since the meeting held in April last.

TRANSACTIONS, PROCEEDINGS AND JOURNALS,
presented by the respective Societies and Editors.

- Berlin. K. preussische Akademie der Wissenschaften,—Monatsbericht, November 1880.
- Bombay. The Indian Antiquary,—Vol. X, Part 118, April 1881.
- . Bombay Branch of the Royal Asiatic Society,—Journal, Vol. XIV, No. 38.
- Bordeaux. Société de Géographie Commerciale,—Bulletin, No. 6, 1881.
- Calcutta. Registers of Original Meteorological Observations for January, February and March 1881.
- Dresden. Sitzungs-Berichte der Naturwissenschaftlichen Gesellschaft Isis, January to December 1880.
- Dublin. Royal Geological Society of Ireland,—Journal, Vol. V, Part 3.
- Haughton, Rev. S.*—Notes on the Annual Water-discharge of Large Rivers, with Indications of some new Methods of Calculation *Ball, V.*—On Spheroidal Jointing in Metamorphic Rocks in India and elsewhere, producing a Structure resembling Glacial “Roches Moutonnées”. *Haughton, Rev. S.*—On Rossetti's Law of Cooling, applied to the consideration of the relative effects of Sun-heat, Earth-heat, Star-heat, and Atmospheric Conditions, upon Climates during Geological Time. *Ball, V.*—On the Evidence in favour of the belief in the existence of Floating Ice in India, during the deposition of the Talchir (Permian or Permian-Triassic) Rocks. *Ball, V.*—On the Coal Fields and Coal Production of India. *Ball, V.*—On the mode of occurrence and Distribution of Gold in India.
- London. Society of Telegraph Engineers,—Journal, Vol. IX, No. 34.
- . Geological Society,—Quarterly Journal, Vol. XXXVII, Part 1.
- Carrall, J. W.*—On the Locality of some Fossils found in the Carboniferous Rocks at T'ang Shan, China.
- . Royal Society,—Proceedings, Vol. XXXI, Nos. 207 to 209.
- . Royal Astronomical Society,—Monthly Notices, Vol. XLI, No. 4.
- . Royal Geographical Society,—Proceedings, Vol. III, No. 3.
- . The Academy,—Nos. 463—466.
- . The Athenæum,—Nos. 2786-2789.
- . Nature,—Vol. XXIII, Nos. 582, 594, 596—597.
- Rome. Società degli Spettroscopisti Italiani,—Memorie, Vol. IX No. 12, December 1880; Index to Vol. IX, 1880; and Vol. X, No. 1, January 1881.
- Shanghai. North-China Branch of the Royal Asiatic Society, Journal, Nos. 13 and 14.

St. Petersburg. L'Académie Impériale des Sciences,—Bulletin, Vol. XXVI, No. 3. •

Dorn, B.—Sur les monnaies des Ileks ou anciens Khans de Turkestan.

———. ———. Mémoires,—Vol. XXVII, Nos. 13—14. •

Dansky, J. and Kostenitsch, J.—Ueber die Entwicklungsgeschichte der Keimblätter und des wolf'schen Ganges in Hühneroi.

———. Russian Geographical Society,—Proceedings, Vol. XVI, 1880, and Vol. XVII, 1881. •

• ———. Acta Horti Petropolitani,—Vol. VII, Part 1.

Sydney. Royal Society of New South Wales,—Journal and Proceedings, Vol. XIII, 1879.

Trieste. Società Adriatica di Scienze naturali Bollettino,—Vol. VI, No 1.

Yokohama. Asiatic Society of Japan,—Transactions, Vol. IX, Part 1.

BOOKS AND PAMPHLETS,

presented by the Authors and Editors.

TRIESENHAUSEN, Prof. W. de. Notice sur une collection de monnaies Orientales de M. le Comte S. Stroganoff. 4to., St. Petersburg, 1880.

WYMAN, F. The Tea Cyclopædia, a volume of Selections from leading and original articles, correspondence and papers collated from the last eight volumes of the Indian Tea Gazette and from several other valuable sources. Roy. 8vo., Calcutta, 1881.

MISCELLANEOUS PRESENTATIONS.

Bericht über die Feier des 50 Jahrigen Doctor-Jubilæums des Prof. Dr. Hermann Burmeister begangen der 19 December 1879 in Buenos Aires Als Manuscript gedruckt. 8vo., Buenos Aires, 1880.

BURMEISTER, DR. H. Description Physique de la République Argentine. Vol. III, Part 1. 8vo., Buenos Aires, 1880.

———. ———. Atlas, Part 2, Lepidoptères, Fol., Buenos Aires, 1880.

MUSILO PUBLICO DE BUENOS AIRES.

Eleventh Annual Report of the U. S. Geological and Geographical Survey of the Territories embracing Idaho and Wyoming, being a Report of Progress of the exploration for the year 1877. By F. V. Hayden. 8vo. Washington, 1879.

DEPARTMENT OF THE INTERIOR, U. S. AMERICA.

FALLON's new English-Hindustani Dictionary, Part II, March 1881.

The Indian Antiquary, Vol. X, No. 118, April 1881.

Selections from the Records of the Government of India, Home, Revenue and Agricultural Department, No. 174. Reports on publications issued and registered in the several Provinces of British India, during the year 1879. 8vo., Calcutta, 1881.

HOME, REVENUE AND AGRICULTURAL DEPARTMENT.

FREDERICI, K. *Bibliotheca Orientalis* for 1877. Dem. 4to., London.

DR. A. F. R. HOERNLE.

MACHADO, J. J. *Moçambique*, 8vo., Lisboa, 1881.

MALHEIRO, L. *Explorações Geológicas e Mineiras nas colonias Portuguezas*. 8vo., Lisboa, 1881.

GEOGRAPHICAL SOCIETY OF LISBON.

Records of the Geological Survey of India, Vol. XIV, Part 1, 1881.

BENGAL GOVERNMENT.

Report on the Judicial Administration (Criminal) of the Central Provinces for the year 1880, Fep., Nagpur, 1881.

CHIEF COMMISSIONER, CENTRAL PROVINCES.

Report on the Administration of the Madras Presidency, during the year 1879-80, 8vo., Madras, 1880.

MADRAS GOVERNMENT.

Reports of the Council of Education upon the condition of the Public Schools, and of the certified Denominational Schools for the year 1879, 8vo., Sydney, 1880.

Annual Report of the Department of Mines, New South Wales, for the year 1878-79, 4to., Sydney, 1879-80. With a map.

ROYAL SOCIETY OF NEW SOUTH WALES.

SCHUBART, TH. *Description et notices sur l'installation et l'entretien des Météorographes graveurs de von Rysselberghe et Schubart, construits pour compte du Ministère des Indes Britanniques*. 8vo., Gand, 1880.

• METEOR. REPORTER, GOVT. OF INDIA.

PERIODICALS PURCHASED.

Calcutta. *The Indian Medical Gazette*,—Vol. XVI, No. 4, April 1881.

———. *The Calcutta Review*,—Vol. LXXII, No. 144, April 1881.

Göttingen. *Gelehrte Anzeigen*,—Nos. 12—16, 1881.

———. *Nachrichten*,—Nos. 6-7, 1881.

Leipzig. *Annalen der Physik und Chemie*,—Vol. XII, Part 3.

———. *Beiblätter*,—Vol. V, Part 3.

London. *The Nineteenth Century*,—Vol. IX, No. 49, March 1881.

———. *Journal of Botany*,—Vol. X, No. 219, March 1881.

Jackson, B. D.—On some recent tendencies in Botanical Nomenclature. *Campanula rotundifolia*, L., in Japan.

———. *Journal of Science*,—Vol. III, No. 87, March 1881.

———. *Messenger of Mathematics*,—Vol. X, No. 10, February 1881;

———. *The Entomologist*,—Vol. XIV, No. 214, March 1881.

Good, W. D.—Butterfly hunting in Natal, on the Coast-Lands.

———. *The Entomologist's Monthly Magazine*,—Vol. XVII, No. 202, March 1881.

London. *Annals and Magazine of Natural History*,—Vol. VII, No. 39, March 1881.

Wallach, Surgeon-Major.—On Siliceous Sponge-Growth in the Cretaceous Ocean. London, Edinburgh and Dublin *Philosophical Magazine*,—Vol. XI, No. 67, March 1881.

———. *The Publishers' Circular*,—Vol. XLIV, Nos. 1044—1045.

———. *Society of Arts*,—*Journal*, Vol. XXIX, Nos. 1478—1481.

———. *The Chemical News*,—Vol. XLIII, Nos. 1112—1115.

———. *Journal of Conchology*,—Vol. III, No. 4, October 1880.

———. *Report of the British Association for the Advancement of Science*, 1880.

New Haven. *American Journal of Science*,—Vol. XXI, Nos. 121—122, January and February 1881.

Paris. *Comptes Rendus*,—Vol. XCII, Nos. 10—13, 1881.

———. *Journal des Savants*, March 1891.

———. *Revue Scientifique*,—Vol. XXVII, Nos. 12—15.

———. *Revue Critique*,—Index to Vol. X, and Vol. XI, Nos. 3, 11—14, 1881.

———. *Revue des deux Mondes*,—Vol. XLIV, Parts 2 and 3.

———. *Annales de Chimie et de Physique*,—Vol. XXII, March 1881.

BOOKS PURCHASED.

GILL, CAPT. W. *The River of Golden Sand; the Narrative of a Journey through China and Eastern Thibet to Burmah. With an Introductory Essay by Col. H. Yule.* 2 Vols. 8vo., London, 1880.

REDHOUSE, J. W. *The Mesnevi (usually known as the Mesneviyi Sherif, or Holy Mesnevi) of Mevlana (our Lord) Jelalu'd-din, Muhammed, Er-Rumi. Book the First. Together with some account of the Life and Acts of the author, of his ancestors, and of his descendants; illustrated by a selection of characteristic anecdotes, as collected by their historian, Mevlana Shemsu-'d-din Ahmed, El Eflaki, El 'Arifi. Translated and the Poetry versified.* 4to., London, 1881.

ROSENTHAL, DR. J. *General Physiology of Muscles and Nerves (Second Edition).* Dem. 8vo., London, 1881.

STEWART, A. and LONG, G. *Plutarch's Lives, translated from the Greek. Vol. II.* 8vo., London, 1881.



• •
Errata in the Proceedings for April.

Page 64, line 2 from foot, after "available" insert full stop

„ 64, „ 2 from foot, for "and the work will be edited with Mādhava's commentary", read "The work will be an edition of Parāśara's lawbook with Mādhava's commentary".

„ 65, line 6, for "Fuzazdaq" read "Feraazdaq".

„ 66, „ 3, for "Schubert" read "Schubart".

[APPENDIX.]

ABSTRACT STATEMENT
OF
RECEIPTS AND DISBURSEMENTS
OF THE
ASIATIC SOCIETY OF BENGAL
FOR
THE YEAR 1880

STATEMENT, *Asiatic Society of*

Dr.

To ESTABLISHMENT.

Salaries,	Rs. 4,421 15 1
Commission, ... ..	... 269 15 2
Pensions, ... ..	... 102 0 0 *
	<hr/>
	4,793 14 3
	<hr/>

CONTINGENCIES.

Stationery, ... ..	... 304 11 9
Lighting, ... ..	... 86 8 0
Building, ... ..	... 843 4 0
Taxes, ... ..	... 780 0 0
Postage, ... ..	... 496 5 9
Freight, ... ..	... 36 0 0
Meetings, ... ..	... 96 12 0
Miscellaneous, ... ..	... 409 12 1
	<hr/>
	2,553 5 7
	<hr/>

LIBRARY AND COLLECTIONS.

Books, ... ..	... 1,095 1 6
Local Periodicals, ... ..	... 66 12 0
Book-cases, ... ..	... 1,036 0 0
Binding, ... ..	... 529 14 0
Coins, ... ..	... 138 9 1
	<hr/>
	3,466 4 7
	<hr/>

PUBLICATIONS.

Printing, ... ..	... 3,849 8 0
Plates, ... ..	... 2,465 12 3
	<hr/>
	6,315 4 3
	<hr/>

To PERSONAL ACCOUNT (Writes off and Miscellaneous),... 954 6 5

Total Expenditure,

 18,083 3 1

To Balance,

 1,44,416 14 11

Total, Rs. ... 1,62,500 2 0

No. 1.

Bengal

Cr.

By Balance from last Report, Rs. 1,43,434 0 11

By CASH RECEIPTS.

Publications sold for Cash,	...	...	6,179 0 0
Interest on investments, ...	...	...	1 15 6
Coins, ...	...	...	4 1 6
Contingencies, ...	...	...	23 4 6
Furniture (sale of old show cases),	...	...
			<hr/> 6,431 7 0 <hr/>

By PERSONAL ACCOUNT.

Admission Fees, ...	...	...	1,168 0 0
Subscriptions, ...	...	...	7,695 0 0
Sales on credit, ...	...	...	1,570 11 0
Miscellaneous (chiefly old outstandings and omissions brought to credit), ...	...	...	2,200 12 1
			<hr/> 12,634 10 1 <hr/>

Total Income, ————— 19,066 1 1

Total, Rs. ...

1,62,500 2 0

JOHN C. DOUGLAS,

Hony. Treasurer, Asiatic Society.

J. WESTLAND, }
J. SCONCE, } *Auditors.*

STATEMENT, *Oriental Publication Fund in Account*

Dr.

To CASH EXPENDITURE.			
Printing charges,	...	...	Rs. 5,230 2 3
Plates,	...	...	... 84 0 0
Editing charges,	...	...	... 973 8 0
Salaries,	...	...	... 866 3 2
Advertising,	...	...	... 120 0 0
Freight,	...	...	... 16 2 6
Contingencies,	...	...	... 91 12 0
Postage,	...	...	... 38 8 3
Commissions on collecting bills,	...	...	... 1 8 3
			<hr/>
			7,424 12 5
			<hr/>
To PERSONAL ACCOUNT (Writes off and Miscellaneous),	...	...	138 7 0
Total Expenditure,			<hr/>
			7,563 3 5
To Balance,	...	...	...
			... 10,540 9 11
			<hr/>
Total, Rs. 18,103 13 4			<hr/>

No. 2.

with the Asiatic Society of Bengal.

Cr.

By Balance from last Report, Rs. 5,004 13 10

By CASH RECEIPTS.

Government allowance,	..	..	9,000	0	0
Publications sold,	...	...	2,105	2	0
Advances recovered,	...	...	103	11	9
			<hr/>		
			11,208	13	9

By PERSONAL ACCOUNT.

Sales on credit,	...	...	1,758	1	9
Miscellaneous,	...	...	132	0	0
			<hr/>		
			1,890	1	9

Total Income, ————— 13,098 15 6

Total, Rs. 18,103 13 4

JOHN C. DUTCH, *Treasurer, Asiatic Society.*

J. WILKINSON, }
J. S. SINGH, } *Authors.*

STATEMENT, *Sanskrit Manuscripts Fund in Account*

Dr.

To CASH EXPENDITURE.

Salaries,	...	...	Rs. 1,383	2	0
Travelling expenses,	...	...	...	291	6 0
Printing,	...	...	...	489	4 0
Plates,	...	...	...	116	14 0
MSS. purchased,	...	...	...	1,103	7 0
Stationery,	...	...	...	19	12 0
Postage,	...	...	...	0	13 6
Copying,	...	...	...	10	2 0
Contingencies,	...	...	...	26	7 0
Total Expenditure,			—————	3,441	3 6
To Balance,	...	...	...	2,131	14 2
				—————	
Total, Rs.				5,573	1 8
				—————	

No. 3.

with the Asiatic Society of Bengal.

	Cr.		
By Balance from last Report,	Rs. 2,339 14 8
BY CASH RECEIPTS.			
Government allowance,	3,200 0 0
Balance of petty cash recovered,	1 1 0
Publications sold for cash,	8 2 0
			<hr/>
			3,209 3 0
BY PERSONAL ACCOUNT.			
Publications sold on credit,	24 0 0
		Total Income,	<hr/>
			3,233 3 0
			<hr/>
		Total, Rs.	<hr/>
			5,573 1 8
			<hr/>

JOHN C. DOUGLAS,

Hony. Treasurer, Asiatic Society.

J. WESTLAND, }
 J. SCONCE, } *Auditors.*

STATEMENT, *Personal*

Dr.				
To Balance from last Report,	..	..	..	4,612 3 4
To CASH EXPENDITURE.				
Advances for purchase of Sanskrit MSS., postage of books				
to Members, &c.,	..	..	..	1,339 8 5
To Asiatic Society,	..	..	..	12,634 10 1
To Oriental Publication Fund,	..	..	..	1,890 1 9
To Sanskrit Manuscripts Preservation Fund,	..	..	..	24 0 0

Total, .. 20,500 7 7

No. 4.

Account.

Cr.

By Cash Receipts, ..	..	..	..	..	12,427	4	3
By Asiatic Society, ..	..	..	..	..	954	6	5
By Oriental Publication Fund, ..	..	..	..	..	138	7	0

By Balances.	Due to the Society.			Due by the Society.			
Old claims,.. ..	1,146	14	..	..	..	..
Members,	4,514	8	1	186	12	11	
Subscriptions to Publications,	1,293	13	2	2,235	12	6	
Employees,	471	4	..	..	..	..
Agents,	1,930	2	7	..	..	..
Miscellaneous, ..	278	12	..	232	6	6	
	9,635	5	10	2,654	15	11	6,980 5 11
Total, ..							20,500 7 7

JOHN C. DOUGLAS,

Hony. Treasurer, Asiatic Society.

J. WESTLAND, }
 J. SCONCE, } *Auditors..*

STATEMENT, *Invest*

Dr.				Nominal.	Actual.
To Balance, .. ..	..	..	..	1,48,300 0 0	1,47,618 0 0
Total, ..				1,48,300 0 0	1,47,618 0 0

STATEMENT, *Trust*

Dr.					
Remitted for Blochmann Memorial, .	..	..	..	1,268 4 6	
To Balance (being servants' pension fund only), ..	..	..	..	1,007 11 4	
* Total, ..				2,275 15 10	

STATEMENT, *Cash.*

Dr.					
To Balance from last Report, .. ..	..	..	..	10,974 9 11	
RECEIPTS					
To Personal account, ..	..	..	..	12,427 4 3	
To Asiatic Society, ..	..	..	..	6,431 7 0	
To Oriental Publication Fund, ..	..	..	..	11,208 13 9	
To Sanskrit Manuscripts Fund, ..	..	..	..	3,209 3 0	
Total, ..				44,251 5 11	

No. 5.

ments.

		Cr.			
		Nominal.		Actual.	
By Balance from last Report,	1,38,300 0 0	1,37,468	0 0
By Cash,	10,000 0 0	10,150	0 0
Total,	1,48,300 0 0	1,47,618	0 0

By an error of transcription the Dr. figures in Statement No. 5, Investments, have been written on the right side, and the Cr. figures on the left side: they should be transposed.

		Cr.			
By Balances from last Report,		{ Blochmann, Memorial Fund,		..	1,268 4 6
		{ Servants' Pension Fund, ..		..	1,007 11 4
Total, ..		..	2,275	15	10

JOHN C. DOUGLAS, •
Hony. Treasurer, Asiatic Society.

J. WESTLAND, }
J. SCORCE, } Auditors.

No. 7.

		Cr.			
EXPENDITURE.					
By Personal account,	1,339	8	5
By Asiatic Society,	17,128	12	8
By Oriental Publication Fund,	7,424	12	5
By Sanskrit Manuscripts Fund,	3,441	3	6
By Investments,	10,150	0	0
By Trust Funds,	1,268	4	6
By Balance,	3,498	12	5
Total,		..	44,251	5	11

JOHN C. DOUGLAS,
Hony. Treasurer, Asiatic Society.

J. WESTLAND, }
J. SCORCE, } Auditors.

Balance Sheet.

JOHN C. DOUGLAS,
Hony. Treasurer, Asiatic Society.

**J. WESTLAND,
J. S. SOONCE,** } *Auditors.*

PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL.
FOR JUNE, 1881.

The Monthly General Meeting of the Asiatic Society of Bengal was held on Wednesday, the 1st June, at 9-15 P. M.

The Hon'ble H. J. REYNOLDS, C. S., Vice-President, in the Chair.

The minutes of the last Meeting were read and confirmed.

The following presentations were announced—

1. From the Marine Survey Department,—Chart of Bankot and entrance to Mhar or Savitri River.

2. From the Bengal Government,—(1), Report on the Amaravati Tope and excavations on its site in 1877, by R. Sewell; (2), Selections from the Records of the Government of India, Home, Revenue and Agricultural Department, No. 174.

3. From the Authors,—(1), Kaiser Akbar, Part II, by Graf. F. A. Noer; (2), Report on the Census of Calcutta taken on the 6th April 1876, by H. Beverley; (3), The Indo-Aryans, their History, Creed and Practice, by Ramachandra Ghosha.

4. From the Magistrate of Fatehpur,—A pice of Shah Alam's reign.

The following Gentleman is a candidate for ballot at the next meeting—

Prince Firukh Shah, proposed by Moulvie Kabiruddin Ahmad, seconded by J. Eliot, Esq.

The SECRETARY reported that Mr. C. E. Buckland had intimated his desire to withdraw from the Society.

The COUNCIL reported that during Dr. M'Cann's absence for a month from Calcutta, Mr. J. Eliot had been asked to officiate as Honorary Secretary.

Mr. C. H. TAWNEY exhibited a rare coin of Sophytes and said—

“While looking through a bag of coins, brought me by Dr. Hoernle, who is engaged in arranging the Society's collection, I found a coin of Sophytes, precisely resembling that described by General Cunningham in the VIth volume of the Numismatic Journal, p. 220 and ff. General Cunningham says the coin is extremely rare. Von Saket in his *Nachfolga Alexander's des grossen*, p. 87, marks it as RRRR. The coin seems to me to be genuine, and I have therefore thought it advisable to exhibit it to the members of the Society. I should propose that it be sent to General Cunningham for his opinion.”

The following papers were read—

1. *On the Voles (Arvicola) of the Himalayas, Tibet and Afghanistan.*—By W. T. BLANFORD, F. R. S., &c., with two plates.
(Abstract.)

In this paper the author gives an account of all the Himalayan, Tibetan and Afghan Voles (9) which have hitherto been described, and for this purpose the author has examined all the type specimens.

The molar teeth of the available forms are figured and described in this paper.

Mr. Blanford considers it very doubtful that any Vole has ever been found in the Oriental region.

This paper will be printed in the current volume of the Journal, Part II, No. 2.

2. *On Myospalax fuscicapillus, Blyth.*—By W. T. BLANFORD, F. R. S., &c.

(Abstract.)

This is a description of a small rodent which was named by Mr. Blyth 40 years ago. The original specimen was obtained at Quetta and another from Afghanistan having been recently found among the collections of the East India Company which have been transferred to the British Museum, Mr. Blanford has compared them and gives a very full description of the species and its affinities.

This paper will also appear in the Journal, Part II, No. 2.

3. *Notes on the Inhabitants of the Nicobars.*—By F. A. DE ROEPSTORFF.

In the Proceedings of the Asiatic Society of Bengal for July 1876 and for January 1881 will be found two papers in which I called attention to the inland tribe of the Nicobars. Since my paper was printed in January, a very interesting expedition was made by Colonel T. Odell, V. C., Chief Commissioner of these islands, and myself, interesting to us and I hope also to the members of the Society. After my success in visiting an

uninhabited village and in opening communication with a Shombeng in October last, Colonel Cadell visited Galathea bay in December with the special intention of visiting the inland tribe on the Galathea river, which had been proved to be there by the members of the Danish Expedition in 1845. The weather was, however, very boisterous, and the coast people could not be prevailed on to act as guides, and the attempt had to be given up.

In March last Colonel Cadell went on another inspecting expedition to the Nicobars, and I was attached to it. After visiting Little Brother, Andamans, Car Nicobar, we anchored at Nancowry and provided ourselves with a guide from there. Next day we visited Pulo Condul, and I prevailed on one of the principal men there to come with us: here we bought a canoe. On the evening of the 15th March, we anchored near the village Laful and at once made arrangements with the natives that they should next day conduct us inland, but this time right up into the country of the Shombengs. During the night we had some heavy showers, and when we started in the early morning it was with doubt as to whether we would be troubled with rain. The rain did not fall and the clouds made our ascent cool and nice. As there was a little surf, we had to land in a canoe that the guides had brought on board the evening before. The Coast-people are as a rule not quick in their movements, but this morning they were very punctual, and within ten minutes after landing we had the luggage deposited on a canoe and we with our two men and five Laful guides were carrying the canoe over the bar at the entrance to the creek. The ascent we made was over the same ground that I had gone over in October and mentioned in my paper of January. The only difference was that we had then ascended the stream in a pouring rain, the stream was swollen, the boulders slippery, I was then panting with fever, and we were neither provided with food nor with clothes. Now the stream was dry, the sky clouded, we were well provided with all we needed ourselves, and, although we left too quickly to provide our guides with any thing, we trusted to the gardens of the Shombengs to supply them.

We passed up the creek, landed, saw the village of the Coast-people, went through the same deserted village of the Shombengs that I visited in October, struck the dry stream and ascended it as on my former visit. Near the spot where we then halted, we came across a little new clearing of the Shombengs which was not there in October. There was only one hut, and here we saw for the first time the very curious cooking arrangement of the Shombengs, which the Galathea Expedition in 1845 came across and describes as follows: "Such a sheet of bark also formed the substance of their cooking-pot, which stood on a stand formed of four little sticks with cross-sticks, under which the fire was laid." Under the little hut in this place there was a bark-pot. It was formed of one sheet of bark bent together.

The open seams were closed by two little sticks on each side which were tied together and had a crosstree to hold them in position. The seams were tightened with clay and the bottom was steadied with ribs like those of a boat. This pot had been exposed to fire. After resting a little here we went on and came at last to the point where we should leave the main stream. Our party was by this time smaller, as two of our Laful guides had gone on ahead to warn the Bengs of our approach. Where a steep hill-waterfall (now dry) opened into the stream-bed, the men deposited the luggage, saying that they would leave it here for the Shombengs to carry up as the hills were too steep.

This boded well, for it showed that they expected the Shombengs would be friendly, that we were not very far off, and also that they put confidence in the people we were going to. We then went up the side-branch and ascended what in the rains must be an inaccessible fortress. The path we found some 1000' up the nullah and it led us up nearly perpendicularly. Along the path were creeping bamboos that were very trying. The road was very steep and straight, and the distance was not proportionate to the fatigue in ascending. At the top of the hill we came on an enclosed village of three houses lying just on the outskirts of an extensive clearing that had been made quite lately, for many of the trees were not yet dry.

The distance we had gone over was computed as follows :

In canoes up the creek about	1½ mile.
Up the stream to first Beng village	1 "
Up the stream to second "	1 "
To where the luggage was deposited	½ "
Up the steep hills	1½ "
The total was thus 5½ miles in a west, slightly south, direction.	
Height ascended above the sea :	
Ascending the stream more than	300'
By the hill ascent about	1200'

Total probable ascent ... 1500'

The village was enclosed by a stockade consisting of split logs, a horizontal piece alternately with one where the logs were in a vertical position. There was no entrance to this enclosure and it had to be climbed: it was about 3' high. The space inside was well cleared and was planted with plantain shoots each surrounded by little protecting sticks. Inside this rail were three huts of the same construction as those described by the "Galathea" Expedition and as those we had seen on our way up but rather bigger. These were raised 3' from the ground, 6' × 6'. The posts were very thin bullies: the roof consisted of back-sheets and a few rattan leaves. Only one house of three was provided with a bark cooking-

pot, but in this it was fixed at the southern end and was on the platform, and not on the ground as was the first one I mentioned. The pot consisted of three sheets of bark, one stuck inside and over the others like roofing: it had been exposed to fire.

We had to climb over some fallen trees, and when we came up to the village we found inside "Koal" the man I had met in October, and an old man suffering from hydrocele. "Koal" recognized me and promised to bring our luggage, and in a little while we were with our guides in sole possession of a Shombeng village. The inhabitants had evidently left on our approach, but they had had time to take away all their valuables, for they only offered us shelter, which, however, was an important point.

Colonel Cadell took possession of one house and I of another. The difference in size was not very great, but it was quite balanced by the cooking pot at the one end that shortened it considerably, so that only two small persons could find shelter in it. After a while our luggage was brought up. Koal and the old hydrocele, however, disappeared again after having brought our guides a few Gunyas. After a while we were informed that the Shombengs were afraid of us and would not come in, so we had to put pressure on. Our guides had no food, and when we declared that we would not leave till we had made friends with the inland tribe they began to bestir themselves. They went off after Koal and after a long explanation he at last promised to bring in some of his friends, saying that they would be with us at 2 P. M., pointing to the sun. We waited patiently till 2 and impatiently after that time, and when it was nearly dark we were beginning to fear that our visit had been all in vain, even our guides were in a bad humour, when we were cheered up by the arrival of a party of this curious people, headed by Koal. We remained seated where we were and took no notice of them till they had come inside the enclosure and stood round us. We then gave them peace-offerings of strings of little glass beads, and in a very short time we were on the best of terms. They submitted to our examining them and to our taking locks of their hair. These little glass beads are the only valuable property they care for and ours were considered very nice. Money they did not even know. Seated near a smoking fire that nearly blinded us, and delighted at our success, we proceeded to examine them, and, to make sure of the accuracy of our notes, they were drawn up by Colonel Cadell on the spot and contain what we agreed about. I give our notes verbatim. The first man mentioned I will refer to later on.

"Koal, Mr. de R's old friend with the bushy hair has already been described.

"No. 1, Alles—height 5' 3", chest 36", age about 30 or 35—hair thin, straight, black, eyes black—well built, but rather bony—parts

loosely tied, as if not often covered at all—pubes sparse—toes spread out—small sparse moustache—a few hairs in beard—teeth discolored but not enlarged—head appears as if flattened behind but this is said not to be customary with Shombengs—color slightly, very slightly, lighter than that of the Coast-people—ears bored, and pith, $\frac{1}{2}$ " diam, through one of them. Double string of white seeds from over left shoulder and below right arm—on both arms strings of dark and light fibre intertwined.

"No. 2, Towkow—height 5' 2 $\frac{1}{2}$ ", chest 36"—age about 16 or 18—hair straight, plentiful, cut square over eyebrows—black-brown eyes, Mongolian shape—high forehead—face long, narrow—nose straight with slight bend—mouth small—teeth slightly discolored—a pleasant face altogether—parts well developed and scarcely concealed—necklace of white seeds—string on arm as No. 1—right ear bored but not enlarged—left with bamboo and leaves through lobes—small strip of red chintz round head.

"No. 3, Ahéan—son of No. 4—age 16—height 4' 11 $\frac{1}{2}$ ", chest 35"—hair straight, long, thin, black—eyes well defined, Mongolian type, but not so much as No. 2—prominent cheek-bones—upper lip thin but protruding—a few single hairs on chin—both ears pierced—a round piece of stick pointed (1" diameter) through one lobe and pith through other—parts small and loosely tied—a well made youth.

"No. 4, Taug—age about 40—height 5' 3"—chest 36"—hair straight, thin, tinged with grey—moustache almost invisible and no other hair on face—both ears pierced—through right, pith $\frac{1}{2}$ " diameter, through left, round piece of stick $\frac{1}{2}$ " diam as No. 3—teeth discolored, but not enlarged—a well built man—parts small, loosely tied—round neck necklace of white and red seed with fringe of pieces of plantain leaf curled—some neatly woven straw in his hand.

"No. 5, Kéal, a priest—age about 30—height 5' 4 $\frac{1}{2}$ ", chest 36 $\frac{1}{2}$ "—eyes small, brown—hair straight, long, black—slight trace of moustache—ears bored, rolled leaf in one—two front upper teeth $\frac{1}{2}$ " long, but no foreign substance on them—necklace of small beads—band of white bark round head."

The following was added next morning:

"No. 6, an old man with hydrocele } whom we did not describe.
"No. 7, ditto ditto . }

"No. 8, Khoál, wife of Koal—about 25—height 5' 1"—chest 31 $\frac{1}{2}$ "—hair straight, coarse, black with brownish tint, parted over eyes, narrow band of white bark round it—both ears pierced, one with a hollow bamboo through it, the other with a stick—teeth discolored but not enlarged—necklace of several rows of small beads—striped red and white cloth round loins, and a loose piece of blue cloth over shoulder or anywhere where

fancy pleased. She brought with her a boy of about 6, a nice intelligent-looking lad, and, afterwards, on her back and hanging to her neck, a small boy of about 2.—T. CADELL."

It will be seen from the above notes that the people is a comparatively big race with straight hair and Mongolian twisted eyes, and in them Col. Cadell agrees with me that every trace of Papuan or Negrito features is quite absent.

There remains, however, Koal the man I met in October. I described him in the paper of Jan. 1881 thus:

"One look at him sufficed to assure me that I had now come across a specimen of a curly-haired race, Papuan or Negrito. His hair was bushy and with rather a bend, and was very abundant. It covered the whole surface of his head and was not, like the hair of an Andaman Negrito, of the Papuan of New Guinea or of the Negro, found in tufts or patches. It had, however, the Papuan quality of being long, longer than the hair of the Andamanese ever is. The hair was, or appeared to be, brownish, interspersed with white, very coarse and stiff, and gave an exaggerated appearance of size to his head....His face was pleasant, especially when smiling, his forehead was high, his eyes were black, his nose well formed and arched, his upper lip was remarkably prominent from the base, his underlip small, his teeth were black but of natural size. ..His colour was copper-brown and a shade fairer than our Great Nicobar and Camorta guides. His complexion did not at all remind me of the deep shining black of the Andaman Negrito...He had his private parts tied up, but in such a loose way that it was evident that the Coast-people are right when they assert that the male Shom-Bengs go quite naked in their own haunts." This description I still maintain is correct. Colonel Cadell states that he noticed that he was quite different from the others and that, if searching for Papuan or Negrito elements, he would most certainly have made the mistake of taking him to be such, if he had seen him alone.

He is quite a phenomenon, but, I think, a *lusus naturæ*, for we saw his children and neither of them had the slightest curl in their hair nor any feature recalling the Papuan. All the others agreed in appearance. They were all scanty-haired on the face and on the body, and we only saw one man (not described in the list) who had a fairly well developed moustache. They seemed of mixed Malay-Mongolian origin, and they were doubtlessly a different race from the Coast-people, being slightly fairer and with lighter hair and darker eyes than they, but yet the difference is not so great that it would be impossible to meet a Shombeng among the Coast-people and not notice the difference.

They are great cultivators and had cleared big tracts of land but in a very slovenly manner. No attempt had been made to burn the fallen trees

nor any to get rid of the branches. They do, however, cultivate deeply, for I got in 1876 from the Shombeng in Ganges harbour a very big yam and some Gunya which must have been carefully grown. One great clearing Col. Cadell and I went over. It was fenced all round, evidently to keep out pigs. The clearing stretched over a small valley from hill top to hill top. The only road across the confused masses of débris lying on the ground was a continual bridge of fallen logs, which seemed well suited to Shombeng feet but less so to boots, and we found it rather difficult to cross. On the top of the other hill we came to two huts. The one was circular and $8\frac{1}{2}$ ' from the ground. They were very dilapidated and did not look fit to withstand the heavy storms of the S. W. Monsoon. Col. Cadell went alone with Koal down a precipice with just space here and there for a naked Shombeng foot and he saw there another big clearing. To me it appeared as if the Shombengs with these clearings were making preparations for next year's operations, and that they leave any occupied piece of land when the virgin-soil fertility is exhausted. As the only domestic animal they keep is the pig, they have no means of manuring the exhausted soil, and they would therefore have to go to new grounds. The little villages near the stream below the hills seemed to me intended for the rainy season as they were in sheltered places and were newly made. After the meeting with Koal the first time, I thought that my idea that the Shombengs were not a Papuan or Negrito race was erroneous. I therefore made haste to publish a report of my meeting and of my doubts. Now that I have met the Shombengs in greater numbers, I beg to revert to my old theory that they are a race different from the Coast-people, without any Papuan or Negrito blood, and I beg again to suggest that they may be the same race originally as the inhabitants of the little Island of Schowra, who live by cultivation whereas all the islanders around them are keen fishermen. They are *also* supposed to be fairer than the Coast-people and have a Mongolian cast about their eyes.

I would have preferred that the report of our visit to the Shombeng country had come from the pen of Colonel Cadell, who would have given a better description of all we saw and heard, especially as the Expedition was originated and carried through by him, but he has suggested that I should write it.

Mr. BALL said: "The proverbial difficulty of proving a negative is well illustrated by Mr. de Roepstorff's paper, which is a further contribution on the subject of the inland inhabitants of the Great Nicobar. His researches do not disprove the supposed existence of a race in the interior of that Island having Negrito affinities; though it must be confessed that they render it less probable than it was thought to be before.

"A thorough scientific exploration of the islands included in the Andaman and Nicobar groups is a great desideratum, not only for the purpose of setting at rest such Anthropological questions, but also in order to completely elucidate the Zoology and Geology.

"With reference to the latter there are two questions of considerable economic importance which have yet to be determined. The first of these is whether coal in workable quantities exists. Hitherto, such coal as has been found in the Andamans and Nicobars only occurs in small nests of limited extent and not in regular seams. The rocks of the Andamans are, so far as is known, of older Tertiary (Eocene) and perhaps partly Cretaceous ages: they are probably closely allied to some of the groups which include workable coal in upper Burma and Assam. In the Nicobars there are rocks of the same age and together with them some which are younger, probably Miocene. There are believed to be distinct points of resemblance between the former and the coal-bearing rocks of Sumatra, Borneo and Java. So that, arguing from analogy, there appear to be grounds for believing that a useful discovery of coal may be made in these islands.

"Some years ago I appended to a paper on the Geology of Port Blair, which was printed in the *Journal*,* three allusions, two distinct, and one less clear, to a rumour that mercury has been found in the Andamans. The mode of occurrence and the age of the rocks with which mercury occurs in different parts of the world vary a good deal; for present purposes it is only necessary to refer to California where the deposits afford two-thirds of the mercury of commerce. *These deposits occur in altered Cretaceous rocks with which serpentine is associated, the ore of mercury, cinnabar, being sometimes found in the serpentine itself. It is believed, as above stated, that some of the rocks in the Andamans will prove to be of Cretaceous age, and it is an ascertained fact that serpentine occurs in some abundance associated with them. Now it is known, all the world over, that similar associations of rocks are often accompanied by the occurrence of similar minerals. It seems therefore to be quite justifiable to express a hope that research may prove the existence of mercury in these islands. It is needless to remark that owing to its high value such a discovery would be of great importance.

"It is now ten years since I directed the attention of some of the officials in the Andamans to the possibility of such a discovery being made and Mr. Homfray, then protector of the Andamanese, shewed them some metallic mercury, but they appeared to be unacquainted with it and nothing was elicited. A much more likely way of being successful would be to make search for cinnabar which is the common ore of mercury.

"The red pigment commonly used by the Andamanese was some years ago analyzed by Dr. Waldie and found to consist of red oxide of iron.

This need not be taken as proving that no source of cinnabar was available to them, because they may have found by experience that the use of the latter was injurious to their health.

"An expedition to explore these islands should be thoroughly well officered and equipped. Speaking from personal experience, I can say that the risk of fever is very great, and those who remain on shore at night will have to take every precaution to avoid its attacks; but, as I have endeavoured to show, there are reasons, both scientific and practical, which encourage the belief that such an exploration would prove fruitful in good results."

4. *Note on a photograph of a Buddhist sculpture found at Bulandshahr.*—By F. S. GROWSE, C. I. E.

The Buddhist sculpture, shown in the accompanying photograph, was discovered a few days ago at Bulandshahr, in the garden of a native gentleman, Munshi Gopál Rái, close to the Id-gah, between the city and the civil station. It had originally been dug up some 20 years previously in the old Khera known as the Moti Bazar, which is now being levelled. It is of interest as being, so far as I know, the only unquestionable proof that has yet come to light of the ancient prevalence of Buddhism in this neighbourhood. The sculptured pillars that I found in the town of Bulandshahr, and of which a notice and illustration were given in the Society's Journal for 1879, may have belonged either to a Buddhist or to a Brahmanical temple; it is impossible to say which, the style of architecture affected by both being essentially the same and differing chiefly in ground plan. The stone, in which the sculpture is cut, is a square block measuring in its mutilated state 1 foot $4\frac{1}{2}$ inches either way, the material being a black slate, not the *sang-músa* or black marble of Jaypur. The principal figure represents the Buddha, enveloped in a thin robe reaching to the wrists and ankles and falling over the body in a succession of narrow folds. His arms are slightly raised in front of his breast and the thumb and fore-finger of his left hand are joined at the tips, while with his right hand he touches its middle finger, as if summing up the points of an argument. On either side of his throne is a rampant hippogriff, with its back to the sage and rearing its head over a devotee seated in an attitude of prayer. The throne is supported on two recumbent lions, flanked by Hindu caryatides with impossibly distorted limbs as usual; and at the base again are other devotees kneeling on either side of the footstool, the front of which is carved with the mystic wheel between two couchant deer. The upper part of the stone has been broken off, carrying with it the head of the principal figure, but what remains is in good preservation and has been well executed. On a ledge in a line with

the feet is an inscription in characters apparently of the 9th or 10th century, of which I sent a rubbing to Dr. Hoernle, who reads it as follows:

Ye dharmmā hetu-prabhavā hetus teshān tathagato hyavadat teshām cha yo nirokha. evam-vidi mahāśramanah.

This would be in English "All things that proceed from a cause, says the Tathāgata, their cause is identical with their destruction; such is the dictum of the great philosopher."* If this is the form of words that is always used, it is curious that a popular symbol of faith should have been framed with so much tautology in so short a compass.

5. *Note on some curiosities found at Bulandshahr.*—By F. S. GROWSE, C. I. E.

In the course of some excavations in the plateau of high ground immediately outside the town of Bulandshahr, mentioned in the previous note under its popular name of the Moti Bazar, I have come upon the remains of an old local manufacture, of which I send six specimens for the inspection of the Society. They may be described as earthenware flasks or vases, but the purpose for which they were intended is by no means obvious, and I should be glad of suggestions. They are all alike in general shape, being pointed at the bottom like a Roman amphora and with a very small orifice for the mouth; but they vary very much in the patterns with which they have been ornamented, and are of different size, weight and thickness. Some have apparently been squeezed out of shape, before the material of which they are made had had time to dry. The spot where they were found is evidently that where they were baked, as the number that have been dug up entire amounts to several scores, besides a multitude of broken pieces, all mixed in a deep deposit of ashes and the other refuse of a potter's kiln.

At the same level have also been uncovered many fragments of wall and pavement, constructed of large and well-burnt bricks measuring as much as 1 ft. 7 in. in length by 11 inches in breadth and 3 in. in thickness. Most of these bricks are marked on one side with two lines drawn by the workman's fingers in the damp clay, and they are, I should say, of great antiquity. At first, however, I did not suppose that the flasks were at all of the same age. The site might have been originally occupied by a fort and then deserted for centuries before the potters came and set up their kilns upon it, making use—for their houses—of any old building materials that they happened to light upon. The traditional name by which the piece of ground is popularly known is, as I have said, the

* [Or rather: "all things that proceed from a cause, their cause as well as their destruction the Tathāgata has declared; such is the dictum of the great philosopher." Ed.]

Moti Bazar, and there 'is much vague talk of coins and solid bars of silver having been discovered there in former years. It is bounded on one side by a deep ravine, which I am now filling up in order to convert the entire area into a public garden, which will be called the Moti Bâgh, thereby perpetuating the old tradition.

Most natives who have seen the flasks think they were meant to hold either gunpowder or oil, which is what the shape suggests; but the material, on account of its weight, seems unsuitable for such a purpose, if the flask was to be carried about on the person, while the pointed bottom makes it awkward for storing. The idea has also been hazarded that they were meant to be filled with gunpowder and then exploded as a kind of fire-works; but, if this were their object, there would scarcely have been so much trouble spent on their ornamentation. A third theory, which has found much favour on the spot, but which at first I was inclined to reject as altogether untenable, is that they were intended to form a balustrade for a balcony or the roof of a house. Perhaps after all this is not so very far wrong; being found at the same level as the Buddha and the bricks and also a seal apparently of the 5th century A. D., an impression of which will be exhibited at the next meeting of the Society, the presumption is that they are of about the same date, and they may be the finials of miniature Buddhist stupas.

A specimen of the bricks, of which upwards of a thousand have been found, is sent also with the vases.

LIBRARY.

The following additions have been made to the Library since the meeting held in May last.

TRANSACTIONS, PROCEEDINGS AND JOURNALS,

presented by the respective Societies and Editors.

Berlin. K. preussische Akademie der Wissenschaften,—Monatsbericht, December 1880.

Bombay. The Indian Antiquary,—Vol. X, Pt. 119, May 1881.

Bordeaux. Société de Géographie Commerciale,—Bulletin, Nos. 7—9.

Calcutta. Register of Meteorological Observations for April 1880.

———. Indian Meteorological Memoirs,—Vol. I, Part 5.

Dresden. Kais. Leopoldinisch-Carolinische Deutsche Akademie der Naturforscher,—Nova Acta. Vols. XXXIX—XL.

- Geneva. Museo Civico di Storia Naturali,—Annali, Vol. XVI.
- Liège. Société Géologique de Belgique,—Annales, Vol. VI.
- Lisbon. Sociedad de Geographia,—Boletin, Second series, No. 3.
- London. Royal Society,—Proceedings, Vol. XXXI, No. 210.
- . Royal Geographical Society,—Proceedings, Vol. III, No. 4, April 1881.
- . Anthropological Institute of Great Britain and Ireland,—Journal Vol. X, No. 2, November 1880.
- . The Academy,—Nos. 467—470.
- . The Athenæum,—Nos. 2790—2793.
- . Nature,—Vol. XXIII, Nos. 589 and 599.
- Paris. La Société de Géographie,—Bulletin, Vol. I, January 1881.
- Rhins, J. Dutreuil de.*—Routes entro la Chine et l' Indo.
- Roma. Società degli Spettroscopisti Italiani,—Memorie, Vol. X, Dispensa 2, February 1881.
- Turin. R. Accademia delle Scienze,—Atti, Vol. XVI, Disp. 1—3.
- Washington. United States Geological and Geographical Survey of the Territories,—Bulletin, Vol. VI, No. 1.
- Gray, A. and Hooker, J. D.*—The vegetation of the Rocky mountain Region and a comparison with that of other parts of the world. *Cope, E. D.*—On some new *Batrachia* and *Reptilia* from the Permian Beds of Texas. *Cope, E. D.*—On a wading Bird from the Amyzon Shales. *Schufeldt, R. W.*—Osteology of *Speotyto Cunicularia* var. *Hypogaea*. *Schufeldt, R. W.*—Osteology of *Eremophila Alpestris*. *Grote, A. R.*—Preliminary List of the North American Species of *Agrotis*, with descriptions. *Cope, E. D.*—On the *Nimravidea* and *Canida* of the Miocene Period. *Cope, E. D.*—On the Vertebrata of the Wind River Eocene Beds of Wyoming.
- Zagreb. Arkeologickoga Druztva,—Viestnik, Vol. III, No. 2.

BOOKS AND PAMPHLETS,

presented by the Authors.

- BEVERLEY, H. Report on the Census of the Town of Calcutta taken on the 6th April 1876. Fcp., Calcutta, 1876.
- GHOSHA, RAMACHANDRA. The Indo-Aryans, their History, Creed and Practice. Demi 8vo., Calcutta, 1881.
- NOER, GRAF. F. A. Kaiser Akbar ; ein Versuch über die Geschichte Indiens in sechzehnten Jahrhundert, Part 2. 8vo., Leiden, 1881.

MISCELLANEOUS PRESENTATIONS.

- SEWELL, R. Report on the Amaravati Tope, and excavations on its site in 1877. 4to., London, 1880.
- Report of the Calcutta Court of Small Causes for the year 1880. Fcp., Calcutta, 1881.

Selections from the Records of the Government of India, Home, Revenue and Agricultural Department, No. 174. Reports on publications issued and registered in the several provinces of British India during the year 1879. 8vo., Calcutta, 1881.

The Indian Forester, Vol. VI, No. 4.

BENGAL GOVERNMENT.

The Indian Antiquary, Vol. X, Part 119, May 1881.

FALLON, S. W. A new English-Hindustani Dictionary, Part 3, May 1881. 8vo., Benares, 1881.

HOME, REVENUE AND AGRICULTURAL DEPARTMENT.

Report on the Police Administration of the Central Provinces for the year 1880. Fcp., Nagpur, 1881.

Report on the Jails of the Central Provinces for the year 1880. Fcp., Nagpur, 1881.

CHIEF COMMISSIONER, CENTRAL PROVINCES.

Annual Report on the Civil Hospitals and Dispensaries in the Madras Presidency for the year 1879. Fcp., Madras, 1880.

MADRAS GOVERNMENT.

Reports of Prof. Joseph Henry, Secretary of the Smithsonian Institution, 8vo, Washington, 1867-76.

SMITHSONIAN INSTITUTION,

PERIODICALS PURCHASED.

Calcutta. Indian Medical Gazette,—Vol. XVI, No. 5, May 1881.

Göttingen. Gelehrte Anzeigen,—Nos. 17—19.

Leipzig. Annalen der Physik und Chemie,—Vol. XII, No. 4.

———. ———. Beiblätter,—Vol. V, No. 4.

London. Journal of Botany,—Vol. X, No. 220.

Clarke, C. B.—A revision of the Indian species of *Leea*. The Coffee-leaf Disease.

———. London, Edinburgh and Dublin Philosophical Magazine, Vol. XI, No. 68.

———. The Journal of Science,—Vol. III, No. 88.

———. Annals and Magazine of Natural History,—Vol. VII, No. 40.

Distant, W. L.—Description of a new Longicorn Beetle from Java. Carter, H. J.—On the Kunker Formation of the Alluvium in India compared with the Flint Formation in the chalk of England. Wood-Mason, J.—Description of *Parantirrhaa Marshalli*, the Type of a new Genus and Species of Rhopaloceros Lepidoptera from South India. A History of the Birds of Ceylon, by Capt. W. V. Leggo.

———. Entomologist,—Vol. XIV, No. 215.

———. Entomologist's Monthly Magazine,—Vol. XVII, No. 203.

Pryer, W. B.—Tropical notes. Distant, W. L.—Description of a new species of *Lycanidae* from Penang. Lewis, G.—New species of *Helotidae* from Japan.

London. Mind,—No. 22, April 1881.

———. Numismatic Chronicle,—Vol. XX, No. 80.

———. Publishers' Circular,—Vol. XLIV, Nos. 1046—1047.

———. Chemical News,—Vol. XLIII, Nos. 1116—1119.

No. 1118. *Pickering, S. U.*—Notes on the Oxides of Manganese.

———. Society of Arts,—Journal, Vol. XXIX, Nos. 1482—1485.

No. 1485. *MacLagan, Genl.*—Indian Section. The Building Arts of India.

New Haven. American Journal of Science,—Vol. XXI, No. 123.

Paris. Comptes Rendus,—Vol. XCII, Nos. 14—17.

No. 16. *Marey, M.*—Inscription microscopique des mouvements qui s'observent en Physiologie. *Gylden, M.*—Sur l' intégrale eulérienne de seconde espèce.

No. 17. *Faye, M.*—Sur une question de Métrologie ancienne; origine du mile anglais.

———. Revue Scientifique,—Vol. XXVII, Nos. 16—19.

No. 18. *Vélain, Ch.*—L' Algérie et la Pays des Kroumirs. *Rochas, de.*—Le Traité des gaz, par Héron d'Alexandrie.

No. 19. *Vernueil.*—Du paludisme considéré au point de vue chirurgical.

———. Revue des deux Mondes,—Vol. XLIV, No. 4, Vol. XLV, No. 1.

———. Revue Critique,—Vol. XI, Nos. 15—18.

———. Journal des Savants,—April 1881.

BOOKS PURCHASED.

BOULGER, DEMETRIUS CHARLES. History of China, Vol. I. 8vo., London, 1881.

MÜLLER, MAX. Sacred Books of the East, Vol. X. 8vo., Oxford, 1881.

TYLOR, EDWARD B. Anthropology: an Introduction to the Study of Man and Civilization. Demi 8vo., London, 1881.



PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL.
FOR JULY, 1881.

The Monthly General Meeting of the Asiatic Society of Bengal was held on Wednesday, the 6th July 1881, at 9.15 P. M.

C. H. TAWNEY, Esq., M. A., Vice-President, in the Chair.

The minutes of the last Meeting were read and confirmed.

The following presentations were announced—

1. From the Home, Revenue and Agricultural Department,—Shering's Hindu Tribes and Castes, vol. III.

2. From the authors,—(1) *Die Culturländer des alten America*; *Die Voelker des oestlichen Asien*: Studien und Reisen, vols. I, II and IV; *Beiträge zur Ethnologie und darauf begründete Studien*; Mexico: Vortrag, gehalten in der Sing-Academie am 18 Januar 1868; and Remarks on the Indo-Chinese Alphabets, by Dr. A. Bastian, (2) Report on accessions to our knowledge of the Chiroptera during the past two years (1878-80); Report on the Geographical Distribution of the Chiroptera; and Sur quelques espèces de Chiroptères provenant d'une collection faite en Algérie par M. Fernand Lataste, by Dr. G. E. Dobson, (3) *Bibliographie Générale de l'Astronomie*, vol. II, pt. 2, by J. C. Houzeau and A. Lancaster, (4) *Govinda Gitika* by Raja Mahendralala Khan.

3. From the Panjab Government,—Glossary of the Multani Language compared with the Panjabi and Sindhi, by E. O'Brien.

4. From the Geological Society of London,—Catalogue of the Library of the Geological Society of London.

5. From A. W. Franks, Esq.,—List of Drawings from the Amravati Tope, Southern India, made for Col. C. Mackenzie, 1816-19, and preserved in the Library of the India Office.

6. From the Political Agent and Superintendent, Charkharee,—twelve copper coins.

The following Gentleman, duly proposed and seconded at the last meeting, was elected an Ordinary Member of the Society :

Prince Firukh Shah.

The following Gentleman is a candidate for election at the next meeting :

H. C. Barstow, Esq., C. S., Magistrate and Collector, Cawnpore, proposed by H. Rivett-Carnac, Esq., C. S., seconded by Dr. G. Thibaut.

The COUNCIL announced that the report of the Auditors of the Society's Accounts had been received, and that the suggestion of the Auditors, that the stock of Books be not entered as an Asset, had been approved.

Dr. HOERNLE exhibited a wax impression of a curious old seal of baked clay, found by Mr. Growse at Bulandshahr, and read the following note on the same and on the vases exhibited at the last meeting by Mr. Growse :

"My excavations at the Moti Bagh are still in progress and this morning the workmen turned up a curious old seal of baked clay, of which I enclose an impression. The oval is divided by two parallel lines into two equal compartments, in the upper of which are two devices, the one a conch shell, the other—which is raised on a little stand—looks like a wing and may possibly be intended for a *chakwá*. In the lower compartment is a name in early characters, probably of about the 5th century A. D., which I read as Sattila.

I have no doubt now that the vases exhibited at the last meeting are the finials of miniature Buddhist stupas, such as are not unfrequently found in old *kheras*. At first I looked upon them as too modern to allow of this suggestion holding good ; but this discovery, on the same spot and at no greater depth, first of a Buddhist sculpture with an inscription in characters of about the 8th century A. D., and now of this seal which may be some 2 or 3 centuries older still, renders it probable that they too may be referred to a period equally remote, when Buddhism was the predominant religion of the neighbourhood."

Mr. BALL exhibited an ancient stone implement made of magnetic iron ore, and said that he was indebted for it to Mr. W. G. Olpherts, to whom it had been sent simply as a specimen of iron ore. Its history had not yet been fully ascertained but it was believed to have been obtained somewhere in the Narbada valley.

The material, magnetic oxide of iron, containing perhaps from 60 to 70 per cent. of iron, though admirably suited on account of its weight and toughness for making into a chipped implement, does not appear to have been often so employed. The present is in fact the only known specimen.

It might be suggested by some that the use of this material was a step in the direction of the substitution of iron for stone, but it would be difficult to prove such a proposition.

The following papers were read—

1. *The Revenues of the Mughal Empire in India.*—By EDWARD THOMAS, F. R. S., late-Bengal C. S.

(Abstract.)

In Volume XLIX of the Journal of the Society a paper was published by Mr. C. J. Rodgers on the "Copper Coins of Akbar," in which he entered into some speculations on the amount of the State Revenue of that monarch, based upon new interpretations of the legends of his coins, and considerably differing from the calculations of Mr. E. Thomas, in his "Revenue resources of the Mughal Empire." The present paper is a brief reply by Mr. Thomas. After mentioning that his calculations have been accepted as correct by Dr. Hunter, Mr. C. Markham and others, he shows that one of Mr. Rodgers' main arguments, based on his reading the word *dám* on Coin No. 4, falls to the ground, inasmuch as the word is not *dám*, but *damrá* (i. e., a double *damri*). He similarly shows that Mr. Rodgers' second main argument is based on a confusion of the terms *tankah* and *tánke*.

This paper will be published in full in the Journal, Pt. I, No. 2, for 1881.

2. *Description of a new species of Butterfly belonging to the genus Dodona.*—By LIONEL DE NICEVILLE.

[Received June 24th ; Read July 6th, 1881.]

DODONA LONGICAUDATA, n. sp.

♂ **UPPERSIDE** deep shining brown. *Fore wing* crossed before the middle by a broad white band which does not quite reach the costa, being narrowest at that point and divided by the nervules into two small spots. This band has its inner margin straight, the outer margin evenly convex. A submarginal series of six white spots placed irregularly. An indistinct marginal series of linear spots. *Hind wing* with the white band of the fore wing continued in a wedge-shaped figure across the disc of the wing, ending in a point just below the first submedian nervure. Abdominal

area paler, with an indistinct white band from the base, and another short transverse one above the anal angle. Incomplete submarginal and marginal bands of white linear spots. Anal lobe black, encircled by a white line and thickly irrorated with white scales. *Tail* long, black; tip and cilia white.

UNDERSIDE rich bright brown, crossed by several silvery-white bands. *Fore wing* with narrow basal and subbasal bands, then a broad median band coincident with the band above but not reaching the costa; a short narrow costal band; then a very irregular broad band which is broken up into spots on the inner side below its middle; and lastly a marginal series of seven spots, the two upper ones rounded and out of line, the rest increasing, linear. The ground-colour near the outer angle becoming darker and almost forming two dark brown spots. *Hind wing* with the two basal and broad median bands as in the fore wing, but all meeting above the anal angle, at which point they are joined by two other white bands traversing the abdominal area. There is also a fourth band from the costa, short, narrow, submarginal, reaching the discoidal pervule, between which and the broad median band there is another narrow white line not reaching the costa, in continuation of which is an orange fascia terminating on the abdominal margin in a black linear spot, and bearing two black rounded spots at its upper extremity. Submarginal and marginal white lines. Anal lobe jet-black, surmounted by a black, white-irrorated space ending in a black spot on the abdominal margin, which space is divided from the lobe by a white line.

CILIA of *fore wing* brown, except a small portion near the inner angle; of the *hind wing*, alternately brown and white.

BODY above deep brown, with a somewhat rufous collar; beneath, white, with a black median abdominal line.

LEGS. The atrophied fore legs are pure white, the two posterior pairs have their tibiae and tarsi ocraceous.

ANTENNAE black, annulated with white.

A single specimen taken by the late Mr. J. P. Cock near Shillong, Assam, in November.

This species seems nearest allied to *Dodona deodata*, Hewitson, from Moulmein, figured in Plate I of Moore's "Desc. new Indian Lep. from coll. Atkinson," Part I, 1879, from which species it may readily be distinguished on the upperside in having only one median white band, being in fact altogether a much darker insect. *D. deodata* is apparently tailless, or the tails are rudimentary.

This is only the eighth species of this very interesting and compact little genus (all of which occur in India) as yet described. It is remark-

able for the length of its tails, which are quite twice as long as those of *D. egeon*, Doubl. Hew., which species has them the next longest of the genus. It will be figured in the forthcoming work on 'The Butterflies of India, Burmah and Ceylon,' by Captain Marshall and myself.

3. *Sketch of the history of the fossils of the Indian Gondwana system.*—By O. FEISTMANTEL, M. D., *Palæontologist, Geological Survey of India.*

(Abstract.)

The fossils of the Indian Gondwana system, the most important series of sedimentary rocks in Peninsular India, have been now under examination for several years, and various memoirs have been published containing descriptions and illustrations of the vegetable and animal remains of this important rock-system. These fossils have been, however, hitherto treated of in a stratigraphical order only, according to the groups from which they were procured. A general review of the fossils in a biological order was hitherto wanting, and as only lately Mr. R. Lydekker gave a sketch of the history of the fossil Vertebrata in India in the Journal of the Asiatic Society of Bengal, the author thought it would prove of some use to write a similar sketch of the Gondwana fossils for publication in the same Journal.

A general review of the literature referring to Gondwana fossils is given, also a review of the various groups of the system with regard to the occurrence of fossils in them; then follows the enumeration of the fossils (vegetable and animal) in a systematical (biological) order, with indication of their geological and geographical distribution, and a few general remarks on the peculiarities of the fossils of this system conclude the paper.

This paper will be published in full in the Journal, Pt. II, No. 3, for 1881.

4. *New and little known Mollusca belonging to the Indo-Malayan Fauna.*—By GEOFFREY NEVILL, C. M. Z. S.

(Abstract.)

This paper contains complete descriptions of certain species of Mollusca which were only briefly described in the author's 'Hand-list.'

The plates include figures of most of the shells previously described by Mr. Nevill, but of which no illustrations have hitherto been published: thus one of the plates represents the brackish-water shells described in the Journal, Pt. II, No. 3, 1880.

In addition to the above there are descriptions of many new and important species lately discovered by Surgeon-Major R. Hungerford at

the Philippines, in Formosa, &c., as well as of some new *Rissoina* which are being figured by Dr. Weinkauff for the forthcoming monograph in the new edition of the well known standard work, the 'Conchylica Cabinet.'

A new species of the brackish-water genus *Fairbankia*, which was discovered by Mr. F. Fedden 10 feet below the surface in Káthiáwár, is also described.

In his preface Mr. Nevill alludes to the unmerited oblivion into which some upper cretaceous *Helicidæ* described by Dr. Stoliczka appear to have fallen. The author also makes some observations on the distribution and probable origin of the land Mollusca of the Madagascar region in connection with some remarks by Mr. A. R. Wallace in his recent work 'Island Life.'

This paper will be published in the Journal, Part II, No. 3, for 1881.

MR. FEDDEN said:—I may mention that the Rissoid shell from the Rann, described in Mr. Nevill's paper, and placed by him somewhat doubtingly in the genus *Fairbankia*, was obtained, together with about a dozen other semi-fossil shells, from a clay bed ten feet below the surface of the "Little Rann" (as it is called, on the north side of Káthiáwár)—the bed from which the brine is obtained at the salt works near Kúra (or Kúda) in the Dhrangadra State. There is first the surface soil, an earthy clay, then a dark plastic clay, thirdly a brown clunch, a close stiff clay, and fourthly the fossiliferous clay, which is dark bluish and plastic, highly saline and gypseous (crystals of gypsum). The base was not reached in the brine pits. From this lower clay I obtained by washing a number of small shells, among which are the following:—

Pirenella, probably two species of this prettily marked shell, the most numerous.

Along with these a few specimens of *Tympanotomus fluviatilis*, (one of the *Cerithidæ*), now common on the coast near the mouths of streams.

Assiminea, a sub-genus of *Rissoa*, and one or two other Rissoids.

A pretty little *Melampus*, probably a variety of *M. striatus*.

Then there are apparently two species of the minute shell *Stenothyra*; one species is *minima*, the other I should call *major*, if new.

There is also a little shell that Mr. Nevill thinks may be a new species of the rare genus *Theora*, and of bivalves a *Glaucomya* (*Glaucanome*), near, if not identical with, the Chinese species (*Chinensis*), a common borer in tidal mud banks, and one or two other shells not yet examined.

It will be seen that the collection, though small, is of some interest to the Conchologist as well as the Geologist. The general *facies* presents a mingling of brackish-water with marine forms, and, considering that the locality is situated 65 miles from the present head of the Gulf of

Kachh, tends strongly to confirm the supposition that the Rann was an annex of the sea not very long ago, but was given up, and, on being evacuated, became silted up.

5. *Additional remarks on the Identification of Ancient Diamond Mines in India.*—By V. BALL, M. A., F. G. S.

(Abstract.)

In this paper the author finally adopts the view that the mine called Raolconda by Tavernier is identical with the modern Ramulkota. In his previous paper he named this as the alternative in the event of Rawduconda not being the place. With the aid of Mr. King the localities mentioned by Tavernier as intervening between Golconda and Raolconda have been fully identified with places between Golconda and Ramulkota where there are still traces of former extensive mines.

One consequence of this is that the measure of distance called the *gos* by Tavernier must have been 8 miles, and the league of Tavernier was not the French league, but a paraphrase for the elastic *cos*.

The present paper confirms the previous identifications as to other mines and includes information illustrative of several points in the original communication.

This paper will be published in the Journal, Pt. II, No. 3, for 1881.

The following communication has been received :

“The Electric Telegraph and Natural History” by W. MacGregor.

LIBRARY.

The following additions have been made to the Library since the meeting held in June last.

TRANSACTIONS, PROCEEDINGS AND JOURNALS,

presented by the respective Societies and Editors.

Batavia. *Natuurkundig Tydschrift voor Nederlandsch Indië*, Vol. XL.

Berlin. *K. preussische Akademie der Wissenschaften*,—*Monatsbericht*, January 1881.

Bombay. *The Indian Antiquary*,—Vol X, Part 120, June 1881.

Bordeaux. *Société de Géographie Commerciale*,—*Bulletin*, Nos. 10 and 11.

Brussels. *L'Académie Royale des Sciences, des Lettres et des Beaux Arts de Belgique*,—*Annuaire*, 1879, 1880 and 1881.

Brussels. L'Académie Royale des Sciences, des Lettres et des Beaux Arts de Belgique,—Bulletins, Vol. XLVI—L, 1878—1880.

———. ———. Mémoires Couronnés,—Vols. X—XIV, XXIX—XXX and XXXII.

———. ———. Mémoires Couronnés et des savants étrangers,—Vols. XXVIII—XXX, XXXIX, Part 2, XLII and XLIII

———. ———. Mémoires,—Vols. XXXI—XXXIII, and XLIII, Part 1.

Calcutta. Registers of Original Meteorological Observations,—May 1880.

Copenhagen. Société Royale des Antiquaires du Nord,—Mémoires, 1878-79.

———. Tilloeg til Aarboger for Nordisk Oldkyndighed og Historie, 1877 and 1878.

Edinburgh. Royal Society of Edinburgh,—Transactions, Vol. XXIX, Part 2, 1879-80.

Schulze, Prof. F. E.—On the structure and arrangement of the soft parts in *Euplectella aspergillum*. Communicated by Sir Wyville Thomson.

———. ———. Proceedings,—Vol. X, Nos. 105—107.

Brander, Surgeon E. S.—Remarks on the Aboriginies of the Andaman Islands.

———. Botanical Society,—Transactions and Proceedings, Vol. XIV, Part 1.

Travill, Dr. W.—On the growth of the New Zealand Flax Plant (*Phormium tenax*) in the Orkney Islands. Christison, Sir R.—On the exact measurement of Trees (Part 4). The Influences of the unfavourable Season of 1879 on the growth of Trees. Thomson, G. M.—The flowering plants of New Zealand, and their relation to the Insect Fauna. Communicated by Professor Balfour.

Geneva. Société de Physique et d'Histoire Naturelle,—Mémoires, Vol. XXVII, Part 1.

Duby, M. J. E.—Choix de mousses exotiques nouvelles ou mal connues. Monographie des *Echinides* contenus dans les couches nummulitiques de l'E'gypte.

Leipzig. Deutsche morgenländische Gesellschaft,—Abhandlungen für die Kunde des morgenlandes,—Vol. VII, No. 2.

London. Society of Telegraph Engineers,—Journal, Vol. X, No. 35, March 1881.

———. Royal Microscopical Society,—Journal, Vol. I. Part 2, (Ser. II) April 1881.

———. Royal Geographical Society,—Proceedings, Vol. III, No. 5, May 1881.

———. Royal Asiatic Society of Great Britain and Ireland,—Journal, Vol. XIII, Part 2, April 1881.

———. Royal Institution,—Proceedings, Vol. IX, Part 3, No. 72.

———. ———. List of Members, 1880.

London. Royal Astronomical Society,—Monthly Notices, Vol. XLI, No. 5, March 1881.

———. The Academy,—Nos. 471—475.

———. The Athenæum,—Nos. 2795—2798.

• ———. Nature,—Vol. XXIII, No. 595, and Vol. XXIV, Nos. 602—605.

Munich. K. b. Akademie der Wissenschaften,—Sitzungsberichte der philosophisch-philologischen und historischen Classe,—Vol. I, Parts 4—5, 1880.

———. ———. Mathematisch-physikalische Classe, Vol. XXIII, Part 1, 1881.

———. ———. Abhandlungen, philosophisch-philologische Classe, Vol. XV, Part 3.

———. ———. Historische Classe, Vol. XV, Part 3.

Paris. La Société de Géographie,—Bulletin, February 1881.

———. La Société Zoologique,—Bulletin, Parts 5 and 6, July to December 1880.

Pisa. Società Toscana di Scienze Naturali,—Atti, Processi Verbali, 13th March 1881.

Rome. Società degli Spettroscopisti Italiani,—Memorie, Vol. X, Nos. 3 and 4, March and April 1881.

Roorkee. Professional Papers on Indian Engineering,—Vol. X, No. 40, April 1881.

Schaffhausen. Société Entomologique Suisse,—Bulletin, Vol. VI, No. 3, February 1881.

Rougemont, Ph. de.—Observations sur l'organe détonant du *Brachinus crepitans* Oliv. *Puton, Dr.*—Enumeration des Hémiptères recoltés en Syrie par M. Abeille de Perrin avec la description des espèces nouvelles. *Gessner E. Frey.*—Syrische Hemiptern.

The Hague. Bijdragen tot de Taal-Land-en Volkenkunde von Nederlandsch-Indië, Vol. III, No 3, and Vol. IV, Nos. 3 and 4.

Turin. R. Accademia delle Scienze,—Atti, Vol. XVI, Disp. 4, March 1881.

Vienna. Anthropologische Gesellschaft,—Mittheilungen, Vol. X, Nos. 8—9.

———. K. K. Geologische Reichsanstalt,—Abhandlungen, Vol. XII, Part 2.

Hoernes, R. and Auinger, M.—Die Gasteropoden der Meeres-Ablagerungen der ersten und zweiten Miocänen Mediterran-Stufe in der österreichisch-ungarischen Monarchie.

———. Jahrbuch, Vol. XXX, No. 4.

———. Verhandlungen, Jahrgang, 1880, Nos. 12—18.

Wellington. New Zealand Institute,—Transactions and Proceedings, Vol. XIII, 1880.

Yokohama. Deutsche Gesellschaft für Natur und Völkerkunde Ostasiens,—Mittheilungen, April 1881.

BOOKS AND PAMPHLETS

presented by the Authors.

- BASTIAN, Dr. Adolf. Die Culturländer des alten America, 2 vols. 8vo., Berlin, 1878.
- . Die Voelker des oestlichen Asien. Studien und Reisen, Vols. I, II, and IV, 8vo., Leipzig, 1866-68.
- . Beiträge zur Ethnologie und darauf begründete Studien, 8vo., Berlin, 1871.
- . Mexico. Vortrag, gehalten in der Sing-Academie am 18 Januar 1868, 8vo., Berlin, 1874. Pam.
- . Remarks on the Indo-Chinese Alphabets. 8vo., London, 1867. Pam.
- DOBSON, G. E. Report on accessions to our Knowledge of the *Chiroptera* during the past two years (1878—80). 8vo., London. Pam.
- . Report on the Geographical Distribution of the *Chiroptera*. 8vo., London. Pam.
- . Sur quelques espèces de Chiroptères provenant d'une collection faite en Algérie par M. Fernand Lataste 8vo., Paris, 1881. Pam.
- FRANKS, A. W. List of drawings from the Amaravati Tope, Southern India, made for Colonel C. Mackenzie 1816-19, and preserved in the Library of the India Office. (Privately printed.) 8vo., Westminster 1881. Pam.
- HOZZEAU, J. C. and LANCASTER, A. Bibliographie Générale de l'Astronomie, ou Catalogue Méthodique des Ouvrages, des Mémoires et des Observations Astronomiques publiés depuis l'origine de l'imprimerie jusqu'en 1880. Vol. II, Part 2. 8vo., Brussels, 1881.

MISCELLANEOUS PRESENTATIONS.

- Tables des Mémoires des Membres, des Mémoires Couronnés et des Mémoires des Savants E'trangers (1858—78). Sm. 8vo., Brussels, 1879.
- ACAD. ROYALE DES SCIENCES DE BELGIQUE.
- Report of the Alipore Reformatory School for the year 1880. Fcp., Calcutta, 1881.
- Annual Report of the Police Administration of the Town of Calcutta and its Suburbs for the year 1880. Fcp., Calcutta, 1881.
- Annual Report on the Insane Asylums in Bengal for the year 1880. Fcp., Calcutta, 1881.
- Records of the Geological Survey of India, Vol. XIV, Part 2, 1881.

Report on the Calcutta Medical Institutions for the year 1880. Fcp., Calcutta, 1881.

BENGAL GOVERNMENT.

KIELHOEN, Dr. F. Report on the search for Sanskrit MSS. in the Bombay Presidency during the year 1880-81. 8vo., Bombay, 1881.

BEHANDARKAR, R. G. Report on Sanskrit MSS. Fcp., Bombay, 1880.

BOMBAY GOVERNMENT.

Report on the Lunatic Asylums in the Central Provinces for the year 1880. Fcp., Nagpur, 1881.

Report on the Nagpur School of Medicine, Central Provinces, for the year 1880-81. Fcp., Nagpur, 1881.

Report on the Working of the Registration Department in the Central Provinces for the year 1880. Fcp., Nagpur, 1881.

Report on the Working of the Charitable Dispensaries in the Central Provinces for the year 1880. Fcp., Nagpur, 1881.

CH. COMMISSIONER, CENTRAL PROVINCES.

DALLAS, J. Catalogue of the Library of the Geological Society of London. 8vo., London, 1881.

GEOLOGICAL SOCIETY, LONDON.

General Report on the Operations of the Survey of India during 1879-80. Fcp., Calcutta, 1881.

Records of the Geological Survey of India, Vol. XIV, Part 2, 1881.

The Indian Antiquary, Vol. X, Part 120, June 1881.

HOME, REVENUE AND AGRICULTURAL DEPARTMENT.

General Report on the Operations of the Marine Survey of India for the year 1879-80. Fcp., Calcutta, 1881.

MARINE SURVEY DEPARTMENT.

O'BRIEN, E. Glossary of the Multani Language compared with Panjabi and Sindhi. 4to., Lahore, 1881.

PANJAB GOVERNMENT.

PERIODICALS PURCHASED.

Benares. Fallon's New English-Hindustani Dictionary, Part 3, May 1881.

Calcutta. Indian Medical Gazette,—Vol. XVI, No. 6, June 1881.

Giessen. Jahresbericht über die Fortschritte der Chemie, Part 3 of 1879.

Göttingen. Gelehrte Anzeigen,—Nos. 20-24, 1881.

———. Nachrichten,—No. 8, April 1881.

Leipzig. Annalen der Physik und Chemie,—Vol. XIII, Part 1.

London. Journal of Conchology,—Vol. III, No. 5, January 1881.

———. Journal of Botany,—Vol. X, No. 221, May 1881.

Clarke, C. B.—A revision of the Indian Species of *Leuca*. Hance, H. F.—On a new Chinese *Senecio*.

London. Journal of Science,—Vol. III, No. 89, May 1881.

———. Quarterly Review,—Vol. CLI, No. 302, April 1881.

———. Edinburgh Review,—Vol. CLIII, No. 314, April 1881.

———. The Ibis,—Vol. V, No. 18, April 1881.

Hargitt, E.—Notes on Woodpeckers.—No. 1, On the *Piculets* of the Old World. •

Gurney, J. H.—Notes on a 'Catalogue of the *Accipitres* in the British Museum,' by R. Bowdler Sharpe (1874). Burbridge's 'Gardens of the Sun,' Sharpe on New Birds from New Guinea.

———. Quarterly Journal of Microscopical Science,—Vol. XXI, No. 82, April 1881.

Cunningham, D. D.—On the development of Certain Microscopic Organisms occurring in the Intestinal Canal.

———. Annals and Magazine of Natural History,—Vol. VII, No. 41, May 1881.

Günther, Dr. A.—Seventh Contribution to the Knowledge of the Fauna of Madagascar. *Niceville, Lionel de.*—Note on *Papilio nebulosus*, Butler. *Butler, A. G.*—On a collection of Nocturnal *Lepidoptera* from the Hawaiian Islands. *Waterhouse, C. O.*—Description of two new Longicorn *Coleoptera* and a new Genus of *Dynastidae*. *Waterhouse, C. O.*—Description of a new species of the Coleopterous Genus *Dryops* from Pekin (Family *Parnidae*). *Wood-Mason, J.*—Description of a new Ornated Species of *Cetoniidae* from North-Eastern India.

———. Philosophical Magazine,—Vol. XI, No. 69, May 1881.

———. Messenger of Mathematics,—Vol. X, No. 11, March 1881.

———. The Entomologist,—Vol. XIV, No. 216, May 1881.

Gooch, W. D.—Butterfly hunting in Natal, on the Coast-lands.

———. The Entomologist's Monthly Magazine,—Vol. XVII, No. 204, May 1881.

———. The Nineteenth Century,—Vol. IX, No. 50—51. April and May 1881.

———. Society of Arts,—Journal, Vol. XXIX, Nos. 1486—1489.

No. 1486. *Westgarth, W.*—Foreign and Colonial Section:—Trade Relations of the Colonies and the mother Country.

———. The Publishers' Circular,—Vol. XLIV, Nos. 1048—1049.

———. Chemical News,—Vol. XLIII, Nos. 1120—1124.

No. 1120. *Pickering, S. U.*—Notes on the Oxides of Manganese. *Prud'Homme, Maurice.*—Dyeing Reds with Artificial Alizarin.

No. 1121. *Pickering, S. U.*—Notes on the Oxides of Manganese. *Romania, R.*—Analyses of Rice Soils from Burmah.

New Haven. American Journal of Science,—Vol. XXI, No. 124, April 1881.

Paris. Annales de Chimie et de Physique,—Vol. XXII, April 1881.

Bertin, M. A.—Étude sur les Miroirs magiques.

———. Revue de Linguistique,—Vol. XIV, Fasc. 2, April 1881.

Vinson, J.—Les premiers Grammairiens basques.—Notes de Silvain Pouvreau.

Vinson, J.—Les basques du XIIe siècle.—Leurs mœurs et leur langue.

Vinson, J.—Spécimen de la poésie civaïste du sud de l'Inde.

Paris. *Journal Asiatique*,—Vol. XVII, No. 2, February—March 1881.

———. *Revue Critique*,—Vol. XI, Nos. 19—22, May 1881.

———. *Revue des deux Mondes*,—Vol. XLV, 15th May and 1st June 1881.

———. *Comptes Rendus*,—Vol. XCII, Nos. 18—22, May 1881.

No. 18. *Jamin, J.*—Sur la force électromotrice inverse de l'arc électrique.

Gylden,—Sur les inégalités à longues périodes dans les mouvements des corps célestes.

———. *Revue Scientifique*,—Vol. XXVII, Nos. 20—24.

No. 20. *Rolland, G.*—Les grandes dunes de Sable du Sahara. De certaines immunités physiologiques de la race Juive.

———. *Journal des Savants*, May 1881.

Philadelphia. *Tryon's Manual of Conchology*, Part 10.

BOOKS PURCHASED.

DAVIDS, T. W. RHYS. *Buddhist Birth Stories; or Jataka Tales*. The oldest collection of Folk-Lore extant, being the *Jatakathàvannana*. Translation. Vol. I. 8vo., London, 1880.

Encyclopædia Britannica, ninth edition, Vol. XII, Hir.—Ind. 4to., Edinburgh, 1881.

FAULMANN, C. *Das Buch der Schrift enthaltend die Schriftzeichen und Alphabete aller Zeiten und aller Völker des Erdkreises*. 4to., Vienna, 1880.

LE CONTE, J. *Sight: An Exposition of the Principles of Monocular and Binocular Vision*. Dy. 8vo., London, 1881.



PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL.
FOR AUGUST, 1881.

The Monthly General Meeting of the Asiatic Society of Bengal was held on Wednesday, the 3rd August 1871, at 9-15 P. M.

C. H. TAWNEY, Esq., Vice-President, in the Chair.

The minutes of the last Meeting were read and confirmed.

The following presentations were announced—

1. From the Bengal Government,—(1) General Rules and Circular Orders of the High Court of Judicature at Fort William in Bengal (Appellate Side; Civil and Criminal), (2) Archæological Survey Reports, Vols. X and XI.

2. From the Bombay Government,—Archæological Survey of Western India, Reports, No. 10, by J. Burgess and Bhagawanlal Indraji.

3. From the German Oriental Society,—(1) *Qolasta*, by Dr. J. Euting, (2) *Epistolæ Novi Testamenti Coptice*, by P. Boetticher, (3) *Indische Studien*, Vol. X, Nos. 1, 2 and 3.

4. From the Institution of Mechanical Engineers,—Library Catalogue, May 1881.

5. From the Authors,—*Sanskrit Wörterbuch in kürzerer Fassung*, Pt. II, 2, by O. Böhtlingk; *The Precedents of Princess Thoodamma Tsari*; *Prince Weezaya*, a Burmese drama, translated by Chr. J. Bandow; *The Revenue Resources of the Mughal Empire in India*, from A. D. 1593 to A. D. 1707, by E. Thomas.

6. From K. Zoologisch Genootschap *Natura Artis Magistra*,—*Catalogus der Bibliotheek*.

7. From the Home Department,—(1) Archæological Survey of India, Reports, Vols. X and XI, (2) *On the Manufacture of Iron and the Future of the Charcoal Iron Industry in India*, (3) *Samaveda Sanhita*, Pt. 2.

8. From the Smithsonian Institution,—*Annual Report for the year 1879*.

9. From the Editing Committee,—The Norwegian North Atlantic Expedition ;—Zoology, Fishes ; and Chemistry.

10. From F. C. Black, Esq.,—A stone slab bearing an inscription, found among the ruins of the old fort of Deogarh.

The following Gentleman, duly proposed and seconded at the last meeting, was balloted for and elected an Ordinary Member :

H. C. Barstow, Esq., C. S.

The following Gentleman is a candidate for ballot at the next meeting :

H. M. Percival, Esq., Professor, Presidency College, proposed by C. H. Tawney, Esq., seconded by A. W. Croft, Esq.

The SECRETARY reported that Dr. G. E. Dobson and Babus Dijendranath Tagore and Jogesh Chunder Dutt had intimated their desire to withdraw from the Society.

The SECRETARY reported that the following coins had been acquired under the Treasure Trove Act :

From the Deputy Commissioner of Balraich,—16 copper coins of Sikander Lodi.

Dr. R. MITRA exhibited a MS. of the Bhāṭṭi Kāvya in Bengali characters, 478 years old, and read the following note regarding it.

Note on a Manuscript of the Bhāṭṭi Kāvya.—By DR. R. MITRA.

I have lately received from my travelling Paṇḍit a MS. of the Bhāṭṭi Kāvya, bearing date Śaka 1326. It is written on yellow paper of Indian manufacture, and comprises 130 folia, each folium measuring $13\frac{1}{2} \times 2\frac{1}{2}$ inches. The writing is in well-formed Bengali letters, differing in no respect from the Bengali writing by Paṇḍits of the last century. The leaves are all stained with water marks, and the colour of the yellow orpiment with which they are dyed is very much faded, bearing unmistakable testimony to the age of the MS. The number of lines on each page is 6, except on a few pages where only 5 lines are written. The colour of the ink is well preserved, except in the marginal notes written at different times by different persons. The name of the scribe is Puruṣhottama Deva Śarmā. A facsimile of the last page is given in plate II.

The work is a standard text-book on grammar in Indian schools, and has already been printed several times, but the codex under notice is the oldest that has yet been discovered, and is worthy of notice from the fact of its being remarkably correct and containing some new readings.

There are two other circumstances in connexion with the codex which are worthy of note. The first is the name of the work, and the second, the

name of its author. In all the modern MSS. of the work that I have seen the name of the book always appears to be *Bhaṭṭi*; and the six commentators whose works are accessible to me in Calcutta either call it *Bhaṭṭi*, or "an epic (*Mahākāvya*) on the history of Rāma." Nowhere is any specific name given for the work. European orientalists, commenting on the work, have invariably used the name *Bhaṭṭi*, without any doubt or qualification. The MS. under notice, however, gives the specific name *Rāvaṇa-badha* or "the Destruction of Rāvaṇa," and in the colophon of the Serampur edition the same name is to be met with, though it is not given on the title-page. The disuse of the specific name can be attributed to one of two causes; either the author left an only work to posterity, and therefore his name was held enough to indicate his work, as in the cases of *Sisupāla-badha* and the *Kirātārjunīya*, which are best known by the names of their authors, Māgha and Bhāravi; or to the fact of there having been another work of the same name of great renown, the *Rāvaṇabadha* of Pravarasena, and the necessity thence arising for a mark of distinction.

As regards the name of the author, commentators are very much divided in opinion. The MS. under notice makes *Bhaṭṭi*, son of *Sṛīdhara Svāmī*, to be the author. Its words are इति बड़भौवास्तथश्रीधरस्वामिस्तुनाभट्टिब्राह्मणस्तु छतो रावणवधे महाकाव्ये तिळन्तकाण्डे लट्प्रदर्शने नाम द्वाविंशतितमः सर्गः। The oldest commentator, Jayamaṅgala, calls him *Bhaṭṭi*, son of *Svāmī*. His words are लब्धं लक्षणं चोभयमेकत्र विदुषः प्रदर्शितुं श्रीस्वामिस्तुनः कविः भट्टिनामा रामकथाश्रयं महाकाव्यं चकार। *Harīhara*, the next in age, follows his predecessor verbatim. *Puṇḍarikāksha*, the 3rd in order of age, in his *Kalāpa-dīpikā*, calls the poet *Bhaṭṭi*, but gives no specific name for the work. The fourth, *Kaṇḍarpa Chakravartī*, calls the work *Bhaṭṭi*, and the author *Bharṭṭihari*. His words are अत्र तावन्महामहोपाध्याय श्रीभट्टहरिकविना शब्दकाण्डयोर्लक्षणं। The fifth, *Vidyāvinoda*, makes the author *Bharṭṭihari*, son of *Sṛīdhara Svāmī*: अत्र कविना श्रीधरस्वामिस्तुनना भट्टहरिणा सर्गवत्तः। And lastly, *Bharata Mallika*, who lived at *Kānchrāpara* in the Hooghly district about 150 years ago, names *Bharṭṭihari*, but does not notice the name of his father: भट्टहरिनामकविः श्रीरामकथाश्रयं महाकाव्यं चकार।

Turning now to the writers of this century, I find the opinion to be equally divided. *Colcbrooke*, in his essay on 'Sanskrit and Prākṛit Poetry,' follows the later commentators and says, "The author was *Bharṭṭihari*, not, as might be supposed from the name, the celebrated brother of *Vikramāditya*, but a grammarian and poet who was son of *Sṛīdhara Svāmī* as we are informed by one of his scholiasts, *Vidyāvinoda*. (Essays, vol. II, p. 116). Professor *Aufrecht*, in his *Bodleian Catalogue*, speaks of *Bharṭṭihari*, "*cujus liber grammaticus, mihi me vero Bhaṭṭikāvyaṃ memoratur*," (p. 175 b)

but in his notices of the *Praudha-manoramā*, (p. 162 b), of the *Subodhā*, (p. 175 a), of the *Amara-kosha*, (p. 182 b), and of the *Sarasvatī-kaṇṭhābharaṇa*, he cites Bhaṭṭi. In the last named work both Bhaṭṭi and Bhartṛihari have been separately cited. Dr. Bhau Dājī observes that Bhaṭṭi "is popularly believed to have been a son of Bhartṛihari," (Journal, Bombay B. R. A. S., J. 1862, p. 219). Bohnen, reciting a tradition which says "Vikrama in fact got possession of the kingdom and took to himself Bhaṭṭi as prime minister," remarks, "in this again they seem to have gone wrong, confounding both persons and times. For there exists a grammatical poem called Bhaṭṭi Kāvya, describing at the same time the exploits of Rāma, which has been attributed to a certain grammarian belonging to a later age called Bhartṛihari, and from the name of this poem, I think, Bhaṭṭi seems to have been considered as the brother of this our Bhartṛihari." (Preface to his edition of the S'atakas of Bhartṛihari, p. 6). In a note in the *Indian Antiquary* (I, p. 319) Paṇḍit Seshagiri Śāstri gives a story (noticed also by Bohnen) which says that "a Brāhmaṇ, named Chandra-gupta, had four wives, one of the Brāhmaṇ caste, another of the Kshatriya, the third of the Vaiśya, the fourth of the Sūdra caste. They were called Brāhmaṇī, Bhānumatī, Bhāgyavatī and Sindhumatī. Each of the four bore him a son. Vararuchi was born of the first wife, Vikramārka of the second, Bhaṭṭi of the third, and Bhartṛihari of the fourth. Vikramārka became king, while Bhaṭṭi served him in the capacity of Prime-minister."

A critical survey of these several diverse opinions shows that the balance of evidence rests with those who take Bhaṭṭi to be distinct from Bhartṛihari. The three oldest scholiasts take Bhaṭṭi to be the name of the author of the Bhaṭṭi-kāvya, so does the MS. under notice, which is 478 years old. The old authors cited by Aufrecht all cite Bhaṭṭi and one of them Bhojadeva, author of the *Sarasvatī-kaṇṭhābharaṇa*, who lived over a thousand years ago, quotes from the works of both Bhaṭṭi and Bhartṛihari, showing clearly that in his time they were two distinct persons and not one with two names. It would not be critical to set aside their opinion on the authority of the three later Bengali scholiasts, none of whom lived at an earlier date than 250 years from this time. Colebrooke avowedly followed these later scholiasts, and does not seem to have made any careful enquiry on the subject. Professor Aufrecht's quotations should have created in him a doubt on the subject; but they did not. On the same page (175) he has given the two names without a remark. Bhau Dājī, Bohnen and Seshagiri Śāstri recognise Bhaṭṭi to be distinct from Bhartṛihari. The traditions quoted by them are at best of little worth, but they are, as far as they go, opposed to the latest scholiasts.

Nor is it difficult to make out how the confusion has arisen. Bhaṭṭa

is an honorific title, meaning a learned man or a professor, and its derivative form Bhaṭṭi is very unlike a proper name, and the latter commentators felt the necessity of searching for something to replace it. How they fell upon Bhartṛihari it is not easy to guess. It may at first sight appear that they thought that Bhaṭṭi must be a corruption of some other word, and as *Bhatti* is the vernacular form of *Bhartṛi* the conclusion was drawn that Bhaṭṭi stood for Bhartṛihari. This is, however, not philologically correct, inasmuch as *Bhatti*, the corruption of *Bhartṛi*, takes the dental and not the cerebral t, and Bhaṭṭi is invariably written with the cerebral and not the dental letters. To Englishmen, most of whom cannot pronounce the dental letters, this may not appear a serious objection, but to Indians the distinction is so marked that it is difficult to conceive a confusion in this respect. There must have been some other cause, but I know not what it was. There is nothing, however, to preclude the use of Bhaṭṭi as a proper name. The diminutive of Bhaṭṭa would be Bhaṭṭi, and the young son of a Bhaṭṭa may well be called by the affectionate diminutive "the little professor" or "teacherling." Indian languages abound in such affectionate epithets, and they are not unknown in Europe. By long usage such epithets stick fast, and cannot afterwards be cast off. In many instances they have absolutely set aside the names given at christening. It may be added that nick-names have often been used as proper names, and the question then naturally arises, is Bhaṭṭi the proper or the nick-name of the author, but there is nothing to decide it. It might have been the one or the other, but certain it is that it was the most popular name, and the author was best known by it.

The next question refers to the name of the author's father. The authorities quoted above give Svāmī or Śrīsvāmī, Śrīdhara Svāmī, Bhartṛihari and Chandragupta. The last two occur in apocryptical stories, and may at once be rejected as false. Jaymaṅgala is the oldest, and appears to be a very cautious and critical scholiast, and he gives the first name which may be accepted as the most authentic. Svāmī is certainly a title, but there is nothing to prevent its use as a proper name, and if we accept the Śrī which precedes it as a part of the name and not an honorific epithet, there would be nothing to object to it. It may, however, be more reasonably taken to be an abbreviation, or the use of the literary title instead of the proper name. The use of titles for proper names is by no means uncommon.

The poet at the end of his work gives a stanza in which he describes his patron who, he says, was king Śrīdhara-sena of Balabhi. The stanza runs thus:—

काव्यसिद्धं विहितं मया बलभ्यां श्रीधरसेननरेन्द्रपाक्षितार्या ।

कौर्णितिर्यं मयतादयो कपल्य सेनकूरः क्षितिषो यतः प्रजानाम् ॥ च ११ श्लोक १५ ॥

“May this poem, written by me in Balabhi, the protected of the great king Śrīdharasena, be to the glory of the king, since the king is the well-doer of the people.”

The Balabhi here mentioned is obviously Balabhipura, the capital of the Saurāṣṭra kingdom, and we know from Wathen's copper-plates that there were three Śrīdharasenas in the Balabhi, Balahara, or Balarāis dynasty.

The first of them reigned in A. D. 319. He was followed by Silāditya I, Charagriha I, and then by a second Śrīdharasena. We have then a Dhruva-sena and then a third Śrīdhara-sena. Which of these three kings was the patron of the poet cannot be made out, but there is no reasonable doubt that one of them was; and we may, therefore, safely place the time of our poet to be the middle or end of the fourth century A. D. As regards the name of the father, the first idea suggested by this stanza is that the commentators confounded the patron with the father of the poet, but, seeing that Śrīdhara in the case of the king is followed by the epithet sena, and in the case of the father by Svāmī, it might reasonably be urged that Śrīdhara the father was distinct from the king of that name. The poet has named the king, and the scholiasts have given the name of the poet's father. Anyhow it is obvious from the epithets assigned to him, and from the way in which he refers to the king, that the poet was not a king, nor the son of a king, nor a prince-minister. He was a Brāhman poet and grammarian of Balabhipura, and had no relation whatever to Vikramārka, Chandragupta, Vararuchi or Bhartṛihari. The time usually assigned to Bhartṛihari is the 3rd century of the Christian era, whereas my deductions bring Bhaṭṭi to the middle or end of the 4th century, showing a difference of about a hundred years—a slight difference in the case of oriental literary history, and by no means such as to prevent scholiasts of the 16th or the 17th or the 18th century from easily confounding the two authors.

Dr. A. F. R. HOERNLE read the following extracts from a letter from General A. Cunningham on some of the Antiquities exhibited at previous meetings of the Society.

“The gold coin with a ring, of which an engraving is given in the Proceedings for February, is quite new to me. I should like to have read the legend as

Sri Champa Raja

but there seems to be a vowel over the first letter of the name—unless indeed it be only an ornament. Can it be *Chaidya* Raja—The Raja of Chadi ?

"I read Mr. Growse's seal as *Mattila*, which is a known name ; see Samudra Gupta's Allahabad Pillar inscription, line 18 of Prinsep's Plate in the Journal of the Asiatic Society of Bengal, November 1837. It is the second name in the line. The first letter cannot by any possibility be s."

Dr. HOERNLE communicated a new reading of the Arian Páli Inscription on the so-called Sue Vihára copperplate. He stated that this inscription had already been read, though imperfectly, by Sir E. C. Bailey and Professor Dowson, in 1870. (See J. A. S. B., vol. XXXIX, pp. 65-70, and J. R. A. S., Vol. IV, pp. 497-502.) Having recently had occasion to examine the copperplate, which forms part of the collection of this Society, he found that some of the letters had hitherto been misread. The rectification of these errors made the meaning of the inscription clear and consistent. Literally translated it is as follows: "On the 20th day of the month Daisios, in the 11th year of the great king, the Overking of kings, the son of the gods, Kanishka ; On the said day, to the mendicant Nágadatta, learned in the Sánkhya (philosophy), the disciple of the Áchárya Damatrúta, the disciple of the disciple of the Áchárya Bhava, putting up his staff (or pillar) ; here the owner of the Dámána Vihára, a female lay-devotee, Balanandí, (who is) much given to penances, and Balajayá, her mother, give a shrine for the staff, and the customary accessories. May it be for the health and wealth of all beings." The paper will be published in the *Indian Antiquary*.

The following papers were read :—

1. *On the Temples of Deoghar.*—By DR. RÁJENDRALÁLA MITRA, C. S. I. (Abstract.)

The paper opens with a description of Deoghar, its situation, extent and population. Then follow some extracts from the Purávas on the origin of the Vaidyanátha temple. The substance of the legend is that Rávana, king of Ceylon, was in the habit of daily paying a visit to a lingam on the Kailása mountain, but, feeling the self-imposed task too troublesome, once sought the permission of the lingam to remove it to Ceylon. The lingam assented on the condition that the removal should be effected by Rávana without a break in the journey, or a deposition of the lingam on the ground any where in the way. Rávana agreed, but when bringing it through mid-air, was obliged to hand it over to a Bráhmaṇ, who deposited it at Deoghar. The principal temples of the place are all located in a courtyard in the north-east quarter of the town. The largest and most sacred one is barely 400 years old, and was erected by one of the Rájás of Gidhor. The rest are of later dates. The presiding divinity of the principal temple is a lingam about 3½ inches high,

and 4 inches in diameter. It is held in the highest veneration, and pilgrims by thousands resort to the place from all parts of India. During the principal festivals, the number of pilgrims varies from 40 to 60 thousand. The lingam is noted for effecting miraculous cures. On the north, the south and the west sides of the temple, there are verandas, in which from 40 to 60 persons are to be daily seen lying in absolute fast for days, in the hope of the divinity disclosing to them in dreams the remedy for their ailments. Most people are blessed with the dream on the 3rd, 4th or 5th day of their fast, but those who are not so blessed even on the 7th day are generally driven away on the 8th to prevent death by starvation. Cures are frequent, particularly of nervous diseases, such as hysteria and the like.

Some of the images in the minor temples are of Buddhist origin. In one temple a figure of Padmapāni is worshipped as Sūrya, and the image of a Bodhisattva does duty in another temple for the goddess of Dawn, Sandhyā. The author is of opinion that the place was originally the site of a Buddhist sanctuary which has been, since the expulsion of the Buddhists, appropriated to Hindu worship. The paper includes texts and translations of all the inscriptions available at the place, as also a drawing of the principal temple and a ground-plan.

This paper will be published in the Journal, Part I.

2. *On the origin of the so-called Kharakpur Meteorite.*—By V. BALL, M. A., F. G. S.

[Received 28th July; Read 3rd August, 1881.]

In the year 1848 a mass of iron supposed to be of meteoric origin, which had been found embedded in the soil on the top of the Kharakpur hills, was forwarded to the Asiatic Society. It was stated that it had been exhumed by the hillmen and had been an object of worship for many years.

Mr. Piddington, who had invited Capt. Sherwill to procure it for the Society, after a physical and chemical examination which is fully detailed in the Journal,* pronounced it to be a veritable meteoric iron. The chemical examination was believed to have revealed the presence of nickel, cobalt and chromium, which metals commonly occur in meteoric irons. The metal was stated to exhibit the damasked lines known as Wiedmannstatten figures which are specially characteristic of meteoric irons.

The result was, in short, that this mass of metal weighing nearly 156½ pounds became renowned as the Kharakpur meteorite and for many years it held a place of honour in the case of meteoric stones in the Society's Museum. About the year 1860 a sample cut from it was

sent to Dr. Haidinger in Vienna and possibly specimens were also sent to other Museums in Europe.

Dr. Haidinger* declared the iron to be of non-meteoritic origin, an opinion which was founded not only on the absence of true Wiedemann-statten figures, but also on an analysis of the metal by Herr Karl Ritter von Hauer which gave 98 per cent. of iron with a residue of silica and carbon; but no trace of either nickel or cobalt.

Recently, when writing the Chapter on Iron for the forthcoming volume on the Economic Geology of India, it occurred to me that it was necessary that the true nature of this iron should be discussed, for, if it were really native iron, it was, though, not of meteoric origin, still worthy of notice. On enquiry I found that the specimen had been removed from the meteorite cases in consequence of its having been shown to be not entitled to its place there; but it seems that its true origin has never been declared. In conjunction with several of my colleagues, I am fully satisfied that it is nothing more nor less than an abnormally large ball or bloom of iron from a native furnace. This view affords a means of explaining the origin of the foot-like portion projecting from the mass which Mr. Piddington endeavoured to explain in connection with the meteorite theory. This foot was simply produced by the impress of the base of the chimney shaft over the hearth which became filled with the iron; such a projection, which is in other words a cast of the form of the bottom of the shaft, is to be seen on the majority of blooms, which resemble in shape inverted 'button' mushrooms with a portion of the stalk remaining.

The Kharakpur iron differs from the native smelter's ordinary bloom in being somewhat larger and in being of less symmetrical shape than is usual. Its preservation and employment as an object of worship were doubtless connected with these facts. It is possible that the hearth may have been of the ordinary size but by a subsidence, due perhaps to an unobserved hollow or ant burrow in the soil underneath, it became enlarged on one side; and thus a long time elapsed after the smelting had commenced before the accumulated metal rose to the usual level at the base of the shaft, when the smelter's custom is to stop the blast, break down the front of the furnace, and pull out, hammer and cut the bloom in two. It may have been that the smelters, already alarmed by the unusual consumption of ore and fuel, were fairly frightened out of their senses when they saw the size of the bloom and thought it was the old *Bhút* himself, and at once proceeded to perform homage, which continued to be offered by their descendants till the time when the bloom was

carried off by an Indigo Planter who presented it to the Society through Capt. Sherwill.

Another simpler explanation of the cause of its having escaped the usual treatment of blooms may possibly be attributable to the fact that its large size, and the comparatively cold state of a great portion of it, rendered it impossible for the smelters to hammer it out.

That the first suggestion, however, is not an extravagant one may be gathered from the fact that recently, when in the close vicinity of the locality where this iron was obtained, I was shown an iron mine which had been deserted for the following reason. Some of the ore had been treated in the usual way, and on the smelters tapping the furnace, so the story goes, two streams, one of blood and the other of milk, flowed from it. Several deaths happened shortly after in the families of the smelters, and since that time, now twelve years ago, no more of that unlucky ore has been used in the furnaces.

As a possible explanation for the origin of the stream of milk, it may be suggested that the ore may have been partly of tin or lead, and the white metal which flowed forth may have suggested milk. The stream of blood may have been imaginary, the idea being simply added to improve the story.

3. *Second List of Rhopalocerous Lepidoptera from the Andaman Islands, with Descriptions of new or little-known Species and Varieties.*—By J. WOOD-MASON, Deputy Superintendent, Indian Museum, Calcutta, and L. DE NICÉVILLE.

(Abstract.)

Since the publication of their first list of Andamanese Butterflies, the authors have received from their active correspondent, Mr. A. R. de Roepstorff, 17 additional species, 13 of which have not been previously recorded therefrom, thus bringing up the total of species from these islands to 125.

The following are the species which are new to the islands or upon which notes are given :—

1. *Cyrestis horatius*, n. sp. Allied to *C. cocles*, which it closely resembles in the character of the markings, but from which it differs in the ground-colour of the upperside being pure white marked with different shades of sepia-brown, in having a pale fulvous patch at the anal angle of the posterior wings, and, on the underside, in having only the lightest portions of the sepia markings absent. Nine males from S. Andaman.

2. *Cyrestis thyodamas*, var. *andamanica*, nova. Differs from all continental examples in the bright fulvous, almost ferruginous, anal region of the posterior wings, &c. A large series of males from S. Andaman.

3. *Neptis jumba*, Moore.

4. *Lampides malaya*, Horsfield.

5. *Arrhopala amantes*, Hewitson.

6. *Amblypodia* (? *Narathura*) *fulla*, var. *andamanica*, nova. Has the wings above brilliant violet-cyanaceous and rather more broadly bordered with black-fuscous: below, pale subochraceous-fuscous with very faint discocellular marks on both pairs and basal marks on posterior ones. Intermediate between *A. fulla*, Hewitson, from Bouru, and *A. arsenius*, Felder, from Luzon. A minute tooth-like tail to posterior wing. One male from S. Andaman.

7. *Papilio rhodifer*, Butler. Female described.

8. *Papilio læstrygonum*, W.-M. Female described.

9. *Papilio prexaspes*, Felder. Female described.

10. *Ismene malayana*, Felder. Female described.

11. *Ismene exclamationis*, Fabr.

12. *Ismene harisa*, Moore.

13. *Ismene badra*, Moore.

14. *Telegonus acroleucus*, n. sp. Anterior wings above tipped with ashy-white and bearing three large diaphanous and lustrous yellow discal spots arranged as in *T. thrax*, than which it is much smaller, &c. Numerous males from S. Andaman.

15. *Plesioneura paralysos*, n. sp. Close to *P. alysos*, but differing therefrom in its broader and less irregularly-margined white band and in having only a single small spot on anterior wings, but two on posterior wings below. Three males and a female from South Andaman. Continental specimens differ in having no trace of the white spots on the underside of the posterior wings.

16. *Plesioneura dan*, Fabr. Differences between Andaman and continental specimens pointed out.

17. *Plesioneura leucocera*, Kollar. Separable by no constant character from several other species since described from other localities.

18. *Tagiades bhagava*, Moore. Female described and notes on male given.

19. *Hesperia sala*, Hewitson. Re-described and stated to be nearest allied to *H. divodasa*, Moore.

20. *Hesperia praba*, Moore.

21. *Telegonus thyrsis*, Fabr. The secondary sexual characters of male described.

The paper, which is illustrated by a coloured plate, will be published in the Journal, Part II, No. 4 for the current year.

LIBRARY.

The following additions have been made to the Library since the meeting held in July last.

TRANSACTIONS, PROCEEDINGS AND JOURNALS,

presented by the respective Societies and Editors.

Baltimore. American Chemical Journal, Vol. I. Nos. 1—6; Vol. II, Nos. 1—6; Vol. III, Nos. 1—3.

———. American Journal of Philology, Vol. I, Nos. 1—4; Vol. II, No. 5.

———. Register of the Johns Hopkins University, for 1880-81.

———. American Journal of Mathematics, Vol. III, Nos. 1—3.

Berlin. K. preussische Akademie der Wissenschaften,—Monatsbericht, February 1881.

Bombay. The Indian Antiquary,—Vol. X, Part 121, July 1881.

Bordeaux. Société de Géographie Commerciale,—Bulletin, Nos. 12-13.

Calcutta. Geological Survey of India,—Memoirs, Vol. XVIII, Part 1.

———. Register of Meteorological Observations for June 1880.

Colombo. Royal Asiatic Society, Ceylon Branch,—Proceedings, 1875-80.

———. ————— Journal,—Part II, 1880; and Vol. VII, Part 1, No. 23, 1881.

Copenhagen. Aarboger for Nordisk Oldkyndighed og Historie, Nos. 3 and 4, 1880.

Frankfurt. Senckenbergische Naturforschende Gesellschaft,—Abhandlungen, Vol. XII, Nos. 1 and 2.

———. ————. Bericht, 1879-80.

Florence. Archivio per l'Antropologia e la Etnologia, Vol. III, Parts 1—4; Vol. IV, Parts 1—4; Vol. V, Parts 1—4; Vol. VI, Parts 1—4; Vol. VII, Parts 1—4; Vol. VIII, Parts 1—4; Vol. IX, Parts 1—3; and Vol. X, Parts 1—3.

Leipzig. Wissenschaftlicher Jahresbericht,—Part 1, 1878.

———. Deutsche Morgenländische Gesellschaft,—Zeitschrift, Vol. XXVI, Parts 3—4; Vol. XXXV, Part 1.

———. Abandlungen für die Kunde des Morgenlandes, Vol. I, Nos. 4—5; and Vol. VI, Nos. 1—4.

London. Royal Astronomical Society,—Monthly Notices, Vol. XLI, No. 6, April 1881.

———. Institution of Civil Engineers,—Minutes of Proceedings, Vol. LXIII, Part 1, 1880-81.

- London. Society of Telegraph Engineers,—Journal, Vol. X, No. 36.
 ———. Institution of Mechanical Engineers,—Proceedings, No. 1, January 1881.
 ———. Anthropological Institute of Great Britain and Ireland,—Journal, Vol. X, No. 3, February 1881.
 ———. ———. List of Members, April 1881.
 ———. Statistical Society,—Journal, Vol. XLIV, Part 1, March 1881.
 ———. Royal Society,—Proceedings, Vol. XXXI, No. 211.
 ———. Zoological Society of London,—Proceedings, Part 4, 1880.
 ———. ———. Transactions,—Vol. XI, Parts 3—4.
 ———. Royal Geographical Society,—Proceedings, Vol. III, No. 6, June 1881.
 ———. Nature, Vol. XXIII, Nos. 591, 595, 598 and 600; Vol. XXIV, Nos. 601, 607—610.
 ———. The Academy, Nos. 476—479.
 The Athenæum, Nos. 2799—2802.
 Lyon. Société de Géographie,—Bulletin, Vol. III, No. 20, 1880.
 Melbourne. Royal Society of Victoria,—Transactions and Proceedings, Vol. XVII.
 Munich. Repertorium für Experimental-Physik, Vol. XVII, Nos. 1—7.
 Paris. La Société de Géographie,—Bulletin, March 1881.
 ———. La Société d'Anthropologie,—Bulletin, Vol. III, Part 4, July to December 1880.
 Simla. United Service Institution of India,—Journal, Vol. X, No. 47, 1881.
 St. Petersburg. L'Académie Impériale des Sciences de St. Petersburg, —Mémoires, Vol. XXVIII, Nos. 1 and 2.
 ———. ———. Bulletin, Vol. XXVII, Nos. 1—2.
 Pisa. Società Toscana di Scienze Naturali,—Atti, Processi Verbali, 8th May, 1881.
 Turin. R. Accademie delle Scienze,—Atti, Vol. XVI, No. 5.
 ———. Osservatorio della Regia Università,—Bollettino, 1880.
 Vienna. Anthropologische Gesellschaft,—Mittheilungen, Vol. X, Nos. 10—12.
 ———. K. k. geologische Reichsanstalt,—Jahrbuch, Vol. XXXI, No. 1, January to March, 1881.
 ———. ———. Verhandlungen, Nos. 1—7, 1881.

BOOKS AND PAMPHLETS,

presented by the Authors.

- BANDOW, CHR. J. The Precedents of Princess Thoodamma Tsari. Translated with numerous explanatory notes, and a vocabulary of the Pali and difficult Burmese words in the text. Demy 8vo. Rangoon, 1881.

BANDOW, CHR. J. Prince Weezaya, a Burmese Drama. Translated. Demy 8vo. Rangoon, 1872.

BÖHTLINGK, DR. O. Sanskrit Wörterbuch in kürzerer Fassung, Part II, 2. 4to. St. Petersburg, 1881.

THOMAS, EDWARD. The Revenue Resources of the Mughal Empire in India from A. D. 1593 to A. D. 1707. A supplement to the Chronicles of the Pathan Kings of Delhi. 8vo. London, 1871.

MISCELLANEOUS PRESENTATIONS.

General Rules and Circular Orders of the High Court of Judicature at Fort William in Bengal (Appellate Side, Civil). 8vo. Calcutta, 1881.

" " (Appellate Side, Criminal). 8vo. Calcutta, 1881.

Report on the Charitable Dispensaries under the Government of Bengal for the year 1880. Fcp. Calcutta, 1881.

Administration Report on the Jails of Bengal for the year 1880. Fcp. Calcutta, 1881.

Thirteenth Annual Report of the Sanitary Commissioner for Bengal, 1880. Fcp. Calcutta, 1881.

Archæological Survey of India, Reports, Vols. X and XI. 8vo. Calcutta, 1880.

BENGAL GOVERNMENT.

BURGESS, J. and INDRAJI, BHAGWANLAL.—(Archæological Survey of Western India, Reports, No. 10.) Inscriptions from the Cave Temples of Western India, with Descriptive notes, &c. 4to. Bombay, 1881.

BOMBAY GOVERNMENT.

Report on the Excise Revenue in the Central Provinces, for the year 1880-81. Fcp. Nagpur, 1881.

Report, with the Chief Commissioner's Review, on Education in the Central Provinces, for the year 1880-81. Fcp. Nagpur, 1881.

CHIEF COMMISSIONER, CENTRAL PROVINCES.

TORNOE, H. The Norwegian North-Atlantic Expedition, 1876-78. Chemistry. 4to. Christiana, 1880.

COLLETT R. The Norwegian North-Atlantic Expedition, 1876-78. Zoology,—Fishes. 4to. Christiana, 1880.

THE EDITING COMMITTEE.

EUTING, DR. J. Qolasta, oder Gesänge und Lehren von der Taufe und dem Ausgang der Seele als mandäischer Text mit sämtlichen Varianten nach Pariser und Londoner Manuscripten, mit Unterstützung der deutschen morgenländischen Gesellschaft in Leipzig. Fol. Stuttgart, 1867.

BOETTICHER, PAULUS. Epistolæ Novi Testamenti Coptice. 8vo. Halæ, 1852.

Indische Studien, Vol. X, Nos. 1, 2 and 3. 8vo. Leipzig, 1867-68.

GERMAN ORIENTAL SOCIETY.

Archæological Survey of India, Reports, Vols. X and XI. 8vo. Calcutta, 1881.

• On the Manufacture of Iron and the Future of the Charcoal Iron Industry in India. Fcp. Allahabad.

The Indian Antiquary,—Vol. X, Part 121, July 1881.

HOME DEPARTMENT.

Institution of Mechanical Engineers. Library Catalogue, May 1881.

With Subject Index of Papers in the Proceedings, 1847-80. 8vo. London, 1881.

INSTITUTION OF MECHANICAL ENGINEERS.

Catalogus der Bibliotheek van het K. Zoölogisch Genootschap, Natura Artis Magistra, te Amsterdam. Roy. 8vo. Amsterdam, 1881.

K. ZOÖLOGISCH GENOOTSCHAP.

Annual Report of the Board of Regents of the Smithsonian Institution for the year 1879. 8vo. Washington, 1880.

SMITHSONIAN INSTITUTION.

PERIODICALS PURCHASED.

Boston. Journal of Natural History,—Vol. VI, Nos. 1—4.

Calcutta. Indian Forester,—Vol. VII, No. 1, July 1881.

———. Calcutta Review,—Vol. LXXIII, No. 145, July 1881.

———. Indian Medical Gazette,—Vol. XVI, No. 7, July 1881.

Geneva. Archives des Sciences Physiques et Naturelles,—Vol. V, Nos. 1—6.

No 2. *Bayer*.—Reproduction artificielle de l'indigo. Voyage sur le "Chal-lenger:" Zoologie.

No. 4. *Wartmann, M. le Prof. E.*—Recherches sur la végétation.

No. 5. *Marsh*.—Les *Odontornithes*, ou oiseaux fossiles à dents de l'Amérique du Nord, décrits.—*Gnehm, R.*—Essais sur la transformation de la cumarine et de ses dérivés en dérivés du groupe de l'indigo. *Lunge, G.*—Détermination du soufre dans les pyrites.

No. 6. *Renavier, L.*—Congrès géologique international à Bologne: Rapport du Comité suisse sur l'unification de la nomenclature.

Göttingen. Gelehrte Anzeigen,—Nos. 25—28.

———. Nachrichten,—No. 10, 1881.

Leipzig. Annalen der Physik und Chemie,—Vol. XIII, No. 6.

———. Beiblätter,—Vol. V, No. 5

London. Nineteenth Century,—No. 52, June 1881.

———. Messenger of Mathematics,—Vol. X, No. 12, April 1881.

———. Journal of Botany,—Vol. X, No. 222, June 1881.

———. Entomologist,—Vol. XIV, No. 217, June 1881.

———. Entomologist's Monthly Magazine,—Vol. XVIII, No. 205, June 1881.

- London. *Annals and Magazine of Natural History*,—Vol. VII, No. 42, June 1881.
- . London, Edinburgh and Dublin *Philosophical Magazine*,—Vol. XI, Nos. 70—71.
- . *Journal of Science*,—Vol. III, No. 90, June 1881.
- . *Publishers' Circular*,—Vol. XLIV, Nos. 1050—51.
- . *Chemical News*,—Vol. XLIII, Nos. 1125—1126, Index; and Vol. XLIV, Nos. 1127—1128.
- . *Society of Arts*,—*Journal*, Vol. XXIX, Nos. 1490—1494.
- Paris. *Annales de Chimie et de Physique*,—Vol. XXIII, May and June 1881.
- . *Comptes Rendus*, Vol. XCII, Nos. 23—26, and Index to Vol. XCI.
- . *Revue Scientifique*, Vol. XXVII, Nos. 25—26, and Vol. XXVIII, Nos. 1—2.
- . *Revue Critique*, Vol. XI, Nos. 24—26, and Vol. XII, No. 27.
- . *Revue des deux Mondes*—Vol. XLV, No. 4; Vol. XLVI, No. 1.
- . *Journal des Savants*,—June 1881.

BOOKS PURCHASED.

- BADGER, GEO. PERCY. *An English-Arabic Lexicon, in which the Equivalents for English Words and Idiomatic Sentences are rendered into Literary and Colloquial Arabic.* 4to. London, 1881.
- BOWERBANK, J. S. *A Monograph of the British Spongiadae*, Vol. III. 8vo. London, 1874.
- BRADY, G. STEWARDSON. *A Monograph of the Free and Semi-Parasitic Copepoda of the British Islands*, Vols. I—III. 8vo. London, 1878—80.
- BUCKTON, GEO. BOWDLER. *Monograph of the British Aphides*, Vols. I, II and III. 8vo. 1876—81.
- St. E'tienne. *Congrès Provincial des Orientalistes Français*,—*Egyptologie*, I Bulletin, Vol. II. 8vo. Saint-E'tienne, 1880.
- DAVIDS, T. W. Rhys. *Buddhist Sutras*, translated from Pali. (F. Max Müller's "Sacred Books of the East," Vol. XI.) 8vo. Oxford, 1881.
- HEWITSON, WILLIAM C. *Exotic Butterflies*. Part 82, April 1st 1872; and Part 83, July 1st 1872. 4to. London, 1872.
- MURRAY, JAMES A. *The Plants and Drugs of Sind; being a Systematic Account with Descriptions of the Indigenous Flora, and Notices of the Value and Uses of their Products in Commerce, Medicine and the Arts.* Roy. 8vo. London and Bombay, 1881.
- SOWERBY, G. B. *Thesaurus Conchyliorum*, Parts 35 and 36. 4to. 1880.
- The Zoological Record for 1879* (Vol. XVI). 8vo. London, 1881.
- WRIGHT, DR. WILLIAM. (Palaeographical Society.) *Facsimiles of Ancient MSS.* Oriental Series, Part VI. Fol. London, 1881.

PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL.

FOR NOVEMBER, 1881.

The Monthly General Meeting of the Asiatic Society of Bengal was held on Wednesday, the 2nd November, at 9 P. M.

C. H. TAWNEY, Esq, M. A., Vice-President, in the Chair.

The minutes of the last Meeting were read and confirmed.

The following presentations were announced—

From St. Xavier's College Observatory,—Results of Observations, January to June 1881.

From the Hungarian Academy of Sciences,—(1) *Codex Cumanicus Bibliothecæ ad Templum divi Marci Venetiarum*, by Comes Géza Kuun, (2) *Nyelvemléktár. Régi Magyar Codexek és Nyomtatványok*, Vols. VII and VIII, by J. Budenz, G. Szarvas, and A. Szilády.

From the British Museum,—(1) Catalogue of the Persian Manuscripts in the British Museum, Vols. I and II, by Chas. Rieu, (2) Catalogue of Oriental Coins in the British Museum, Vol. VI, (3) Catalogue of the Birds in the British Museum, Vol. V, by R. B. Sharpe, (4) Illustrations of Typical specimens of *Lepidoptera Heterocera* in the collection of the British Museum, Pt. V, by A. G. Butler.

From the Editing Committee, The Norwegian North Atlantic Expedition 1876-78, Zoology, *Gephyrea*, by D. C. Danielssen, and Johan Koren.

From the Johns Hopkins University,—On the Mechanical Equivalent of Heat, with Subsidiary Researches on the Variation of the Mercurial from the Air Thermometer and on the Variation of the Specific Heat of Water, by Henry A. Rowland.

From the Home Department,—Sacred Books of the East, Vols. X and XI, edited by Max Müller.

From the Society,—Katalog der Bibliothek der deutschen Morgenländischen Gesellschaft, II.

From the Authors,—(1) On the Land Shells of the Island of Socotra collected by Professor Bayley Balfour, by Lieut.-Col. H. H. Godwin-Austen, (2) Bilingual Coins of Bukhara, by Edward Thomas.

From the Indian Museum,—Annual Report for April 1880 to March 1881.

From the Geological Survey of India,—Popular Guides to the Geological collections in the Indian Museum No. 1, Tertiary Vertebrata, by R. Lydekker, No. 2, Minerals, by F. R. Mallet, and No. 4, Palæontological Collections, by Dr. O. Feistmantel.

From the Marine Survey Department,—Return of Wrecks and Casualties in Indian waters for the year 1880, and charts of (1) Stewart's Sound, (2) Sadashivgad Bay including Port Karwar and Beitkul Cave, (3) Arabian Sea.

From J. V. Juggarrow's Observatory,—Results of Meteorological Observations, 1880.

From Lieut. R. C. Temple,—Note on two Maps of the Andaman Islands (with Maps), by E. H. Man and Lieut. R. C. Temple.

From the Meteorological Reporter to the Government of India,—Report on the Meteorology of India in 1879, 5th year.

From the Panjab Government,—(1) A complete Dictionary of the Terms used by Criminal Tribes in the Panjab together with a short History of each Tribe, and the Names and Places of Residence of individual Members, by Muhammad Abdul Ghafur, (2) Appendix—A detailed Analysis of Abdul Ghafur's Dictionary of the Terms used by Criminal Tribes in the Panjab, by Dr. G. Leitner, (3) A sketch of the Changars and of their Dialect by Dr. G. W. Leitner.

From the Société Zoologique de France,—De la Nomenclature des Êtres Organisés.

From the Society,—Catalogue de la Bibliothèque de la Société Nationale des Sciences Naturelles et Mathématiques de Cherbourg, Pt. I, by Auguste le Jolis.

From Mr. J. de Goeje,—The History of the Almohades by Abdo'l-Wáhid al-Marrékoshi, by R. Dozy.

From the Government, N. W. P.—Notes on the Economic Products of the North-Western Provinces, Pt. V.

The SECRETARY read the following extracts from a letter from Dr. R. Mitra forwarding a presentation copy of his work entitled: "Indo-Aryans: Contributions towards the Elucidation of their Ancient and Mediæval History."

"Will you do me the favour to present the accompanying two volumes to the Asiatic Society at its next meeting? The Library of the Society afforded me the materials for my researches; the kind consideration shown me by the Society enabled me to persevere in my undertaking; and the publications of the Society provided me the means of bringing to light the fruits of my labours. In now bringing out a new edition of my

essays, I cannot allow the opportunity to pass without expressing my grateful acknowledgments to the Society."

The **PRESIDENT** announced that, according to Rule 7, the following Gentlemen had been elected Ordinary Members of the Society by the Council during the recess :—

H. M. Percival, Esq., proposed by C. H. Tawney, Esq., seconded by A. W. Croft, Esq.

Chr. J. Bandow, Esq., proposed by Dr. A. F. R. Hoernle, seconded by Dr. H. W. M'Cann.

These elections were confirmed by the meeting.

The **SECRETARY** reported that since the last meeting in August, the following Gentlemen had intimated their desire to withdraw from the Society :—

Dr. D. B. Smith, H. K. W. Arnold, Esq., and that the elections of the following Gentlemen had been cancelled under Rule 9, as they had not paid their admission fee and first quarter's subscription :—

R. O. Lees, Esq., proposed by L. Schwendler, Esq.

Babu Peary Mohan Guba, proposed by Babu Adharlal Sen.

Babu Trailokyanath Mitra, proposed by Babu Adharlal Sen.

The following Gentleman duly proposed and seconded at the September meeting of the Council was elected an Ordinary Member :—

L. de Nicéville, Esq., proposed by H. B. Medlicott, Esq., seconded by Dr. J. Anderson.

The following Gentlemen are candidates for ballot at the next meeting :

R. Logan, Esq., proposed by Hon. H. J. Reynolds, seconded by J. Westland, Esq.

J. J. Monteath, Esq., M. D., proposed by J. Wood-Mason, Esq., seconded by Dr. D. D. Cunningham.

The **COUNCIL** reported that, in consequence of the deaths of Sir John Philippart, the Count de Noe, Professor Isaac Lea, Colonel W. Munro, and Sir J. W. Colville, there were five vacancies in the list of Honorary Members, and recommended to the Society the four following gentlemen for election as Honorary Members at the next meeting :—

Dr. William Wright, Professor of Arabic in the University of Cambridge, on account of his distinguished services to Arabic scholarship.

Dr. Rudolph v. Roth, Professor of Sanskrit in the University of Tübingen, for his services to Sanskrit scholarship, especially in co-editing the St. Petersburg Sanskrit Dictionary and the Atharva Veda Sanhita.

Sir William Thomson, Professor of Natural Philosophy in the University of Glasgow, and Hermann L. F. Helmholtz, Professor of Physics in the

University of Berlin, for their numerous and important contributions to Science, both theoretical and practical.

The COUNCIL also recommended that the remaining vacancy be left unfilled for the present.

The COUNCIL reported that the bust of the late Mr. Henry Blochmann had been received, and that a suitable pedestal had been ordered for it.

The SECRETARY announced that the following works had been sanctioned for publication in the Bibliotheca Indica, on the recommendation of the Philological Committee :—

The text of the *Lâmiyyet-el-Arab*, accompanied by two translations, one in prose and the other in verse, by C. J. Lyall, B. A., C. S.

A translation of the 2nd Volume of *Abd-ul-Kadir's Muntakhab-ul-Tawarikh*, by Rev. W. H. Lowe, M. A.

The COUNCIL reported that Mr. V. Ball had tendered his resignation as Honorary (Natural History) Secretary and Treasurer, on his departure for England, and that Mr. Wood-Mason had resumed the Natural History Secretaryship and Mr. J. Eliot had consented to act as Treasurer.

The COUNCIL recommended that, in consideration of Mr. Ball's long services to the Society, and his numerous and valuable contributions to Indian Science, he be presented with the Society's publications gratuitously for the rest of his life.

This was unanimously agreed to.

The SECRETARY read a letter from Col. J. F. Tennant, F. R. S., dated 21st October, forwarding four photographs of the Tierra del Fuego savages at the Bois de Boulogne, Paris, together with a short account of them in French. Owing to a famine which last year depopulated Tierra del Fuego, these savages were compelled to beg for food from the Captain of a German vessel, and were induced by the promise of a plentiful supply of provisions to allow themselves to be brought to Europe. Although belonging to the most degraded and ferocious of savage races, under kindly treatment they have become fairly docile, and by appealing to their love of imitation have been induced to adopt various civilized habits. For example, although the instinct of modesty is dormant within them, they have become particular about their clothes, through noticing that all the visitors to the Jardin d'Acclimatation are scrupulously covered from the neck to the feet. The photographs exhibited were obtained by first photographing some *employés* of the Garden, and thus inducing them out of a love of imitation to submit to the same process. So also, after some of the *employés* had been vaccinated in their presence, they complacently submitted to the same operation.

At first they satisfied their thirst by plunging their faces into water and drinking like cattle: but they have now learned to drink out of a glass or from a tap. They have made no improvement, however, in the matter of food, which is principally flesh-meat either eaten raw or rudely cooked by placing it for a few minutes on hot cinders. When coins were first presented to them by visitors, they mistook them for food and tried to eat them: on finding out their mistake, they threw them away in disgust. They refuse to sleep on anything but a rude bed of straw, which they take no trouble to renew. They remain generally quite silent, rarely speak to one another, and then only in a low voice, and only show any vivacity of expression when they are eating their meals.

COL. TENNANT says of these photographs—

“Low as their intellect is said to be, I do not think that the photographs show any great want of natural intelligence, and in this respect they agree with my own impression. Indeed, I think they are not unfair likenesses of the people.”

The SECRETARY read the following letter from Mr. J. B. N. Hennessey, F. R. S., Deputy Superintendent, Survey of India, on an outburst of sun-spots observed at Dehra Dun:—

“The following particulars of an outburst of sun-spots may be of interest to the Society not only on account of the magnitude of the occurrence but because the time of the event is known within *small* limits.

“I premise briefly, that a Photoheliograph is in daily use at the office of the Trigonometrical Branch Survey of India, Dehra Dun, of which I have executive charge. At present the instrument yields only 4-inch pictures. At least two negatives are taken daily of the sun when visible.

“On the 25th July 1881, the earliest negative obtained was at 3h. 58m. p. m. (Local Apparent Time): it exhibited several sun-spots as is now usual and of which therefore little need be said, for it is no doubt known to the Society that the sun for some months past has resumed a state of considerable energy in respect to development of features: this negative for the sake of distinction may be understood by N_1 . The second negative or N_2 was taken at 4h. 47m. p. m. On comparing N_1 and N_2 , it was at once seen that in the interval of 49m. a considerable group of spots had appeared in the neighbourhood of the sun's centre. It is difficult to reproduce with fidelity such features from so small a negative even by means of a silver print. I, however, enclose a hand-tracing of the negative N_2 (Plate III), in which the new group of spots is shown in red, so that the position of the group may be nearly inferred.

“This new group consists of 16 spots of which no individual spot is notably large, but there is this peculiarity about them all that they exhibit hardly any penumbra but consist almost entirely of well defined umbra:

what penumbra appears is confined chiefly to two spots, where it is seen only to the S. E.

"As to magnitude, the spots are scattered over an area of some 6000 millions of square miles, while the collective area of the spots themselves is about 630 millions of square miles, or, say, 6 times the area presented by the earth to a distant spectator.

"Unhappily the sun remained invisible till the 30th July, when two negatives were taken, *i. e.*, after an interval of just 5 days; so far as solar rotation could effect, the so-called new group of N_2 should have been visible not far from the sun's western edge; but the entire group had vanished leaving no trace behind. In the interim of 5 days, 2 new spots had come out; of *one* of these I may add that the umbra is about 200 millions of square miles and the penumbra some 700 millions, presenting in all a single feature of more than 900 millions square miles, or say 9 times the area exhibited by the earth to a distant spectator.

"It will be seen from the foregoing that a considerable group of sun-spots burst into view about the centre of the sun on 25th July 1881 between the hours of 3h. 58m. P. M. and 4h. 47m. P. M. local apparent time, Dehra Dun."

DR. M'CANN drew the attention of the Society to some letters which had appeared in "Nature" from Professor Piazzzi Smyth, which were of interest in connection with the outburst of sun-spots observed by Mr. Hennessey. It appears that on January 26th of this year, a most peculiar series of clouds formed in the upper regions of the atmosphere above Madeira. These clouds resembled closely the appearances observed in vacuum-tubes through which electrical discharges are passing: and Professor Smyth attributes their formation to the passage of electrical discharges from the earth through the upper rarefied regions of the atmosphere. Professor Smyth, who had an observatory fitted up at Madeira, found that, simultaneously with this extraordinary cloud phenomenon, there was a sudden outburst of sun-spots in the centre of the sun's disc. A month afterwards, on July 26th, a precisely similar series of clouds was formed over Madeira. From its exact resemblance to that of June 26th, Professor Smyth formed the opinion that there would probably be a similar outburst of sun-spots: but, as his observatory was by this time dismantled, he was unable to verify this inference. Now, however, Mr. Hennessey's independent observation at Dehra Dun shows that Professor Smyth's inference was correct, and that in this case also the appearance of the electrical cloud was immediately preceded by a sudden outburst of sun-spots, indicating a sudden increase of solar activity.

The SECRETARY read a communication from the Under-Secretary to the Government of Bengal, Judicial Department, giving some particulars of the tenets, habits, customs, and places of residence of the sect of Hindu

dissenters called "Kumbhupatias," who recently made an attack on the Temple of Jaggannath in Puri, with the object of burning the idol of Jaggannath, during which one of them was killed. The Chief Commissioner of the Central Provinces gives the following account of the sect.

"There is a peculiar sect of Hindu dissenters in the Sambulpore district, known as Kumbhupatias. The word Kumbhupatia is derived from 'kumbhu,' the name of a kind of tree, and 'pat,' the bark of a tree, and the sect is so called because its followers make ropes from the bark of the tree and wear them round their waists. The religion is also known as that of *Alekh*, and its followers claim revelation as its foundation. Alekhsamy, the god incarnate, used, it is said, to reside in the Himalayas, but about the year 1864 he came to Malbaharpore in Banki, zillah Cuttack, and revealed the religion professed by the Kumbhupatias to 64 persons, the principal of whom was Govind Dass; and it is chiefly owing to the exertions of these disciples that the religion was propagated. Alekhsamy (which signifies 'the lord whose attributes cannot be described in writing') removed to Dhenkanal, a feudatory State in Cuttack, where, for three years immediately preceding his death, he led the life of a mendicant and wanderer. Although the religion originated in Cuttack, it spread more rapidly in the district of Sambulpore, and men of all classes and castes, except the Uriya Brahmans, are freely embracing it. It is not so much the peculiarity of the rules of any particular caste or sect that tends to increase the number of converts to it as the position in life of the converts themselves: thus in Khinda the people of a whole village embraced the Kumbhupatia religion because the Gaontia had done so. The names of some thirty villages are given as those in which the Kumbhupatias chiefly reside.

"There are three sects of Kumbhupatias—(1) the Kumbhupatias proper, who wear ropes made of the bark of trees; (2) the Kanapatias, who wear rags; and (3) the Ashritas or Grosthes, who lead a family life. The first two sects renounce the world and make no distinction of caste. They eat food given by people of any caste, except by a Raja, who is supposed to accumulate his wealth by oppressing and torturing his subjects; by a Bráhmaṇ or *bhandari*, because he accepts gifts made in *shraddh* ceremonies; by a washerman, because he washes the clothes of all classes of people; and by a *hadi*, because his occupation is filthy. The third sect do not renounce the world nor deem celibacy essential, nor are they turned out of caste. They look up to the other two sects as their '*gurus*' or spiritual guides, and follow their religion. They bathe in the early morning.

"Each sect has a separate temple or place of prayer. They believe in one Supreme Being, who is called Alekh; truthfulness, obedience to spiritual guidance, and faith are the principal tenets of their religion. They believe in the existence of the thirty-three crores of Hindu gods and god-

desses, but they do not respect their images, as they argue that it is impossible to represent the form of the Supreme Being, whom no one has ever seen, nor do they worship the Hindu gods and goddesses; there is indeed reason to think that, unlike the followers of Rāmanand, Kabir, and Chaitanya, they have an antipathy to them, as they dislike to touch the *tulsi* plant, because it is held sacred by the Hindus, and will not eat the flesh of a goat, because it is offered in sacrifice to the Hindu goddess Kali. They eat and drink only in the daytime; if they feel hungry or thirsty at night they can drink water only. They pray in the open air every day (morning and evening) with their faces turned towards the sun, and with their hands folded and held at the nose. If four or more persons join in the prayer, one of them recites, in humble words and suppliant voice, the praises of the Almighty, the others repeating the words after him. They bow down, prostrating themselves to the ground, 64 times, corresponding to the number of disciples of their god. Their habits are very filthy. They take no medicine, but rely on the help of their god alone for recovery: in case of severe illness, they take a little earth from the prayer-ground, mix it with rice-water, and drink the mixture. During the past two years the Kumbhupatias have divided into two sections. Formerly Bhima Kondh of Sonapore was the leader of the sect. Bhima was born blind, but he appears to have been endowed with natural talents of a superior order. Though unable to read and write, he had some Uriya religious books, such as the Mahabharat and Srimat Bhagbat, read to him; and the education he thus received enabled him to compose two or three volumes of verses in praise of the Almighty, which, it asserted, would do credit to any Uriya scholar of the present day. He exercised great influence over his followers. The relations existing between him and a female companion, however, excited suspicion among his adherents, who, however, did not venture to question the purity of his conduct until the woman became pregnant. Bhima endeavoured to deceive his followers by telling them that the woman would give birth to Arjun, who would root out all unbelievers. They believed this story, and waited until the child was born, when, to their great surprise, they found that the woman gave birth to a girl. Bhima accounted for this by saying that it had recently been revealed to him that the woman would give birth to a female, who would destroy all the unbelievers by means of her charms. The child, however, died a few days later, and Bhima then tried to mislead his followers still further by saying that the fairy had quitted this world because she had found it filled with the vices of mankind. He was now deserted by most of his followers, who formed a separate faction, but he is still highly adored and honoured by the remainder. He has erected an altar, over which he and his wife sit in the morning. His followers worship them and move round the altar until the time for their morning meal arrives, when their feet are washed

with milk, which is afterwards drunk by their adherents. Another cause of dissension was because Bhima pretended that he himself was their god.

"The Kumbhupatias who made a crusade against Jaggannath were residents of Chunderpore. Dasa Ram, the leader of the party which proceeded to Puri, and who was killed in the scuffle at the temple, thought that, if Jaggannath were burnt, it would convince the Hindus of the futility of their religion, and that the whole world would thereby embrace the true religion. This account is given by some of the Kumbhupatias who reside in Sambulpore; and it is not improbable that the man was actuated by dreams, in which the Kumbhupatias firmly believe. If any member of the fraternity breaks any of the rules, speaks an untruth, or commits a crime, he is excommunicated. A man undergoes an examination before he is admitted into the sect. It is stated that the tehsildar of Ungul in Cuttack has been successful in reducing crime within his jurisdiction by encouraging a criminal class called "Pans" to embrace the Kumbhupatia religion."

The PHILOLOGICAL SECRETARY read a Memorandum on some coins by Mr. T. A. M. Gennoe, with notes by General A. Cunningham and Dr. Rájendralála Mitra.

These coins were five in number, but in the opinion of General A. Cunningham and Dr. Hoernle only two of them were genuine: and these are already noticed in Marsden's *Oriental Coins*, pp. 735 ff. and, according to General Cunningham, can be procured readily in every large town in Northern India.

The following papers were read—

1. *On a Silver coin of Shams-ud-din Kaimurs.*—By J. G. DELMERICK.

With a note by GENERAL A. CUNNINGHAM.

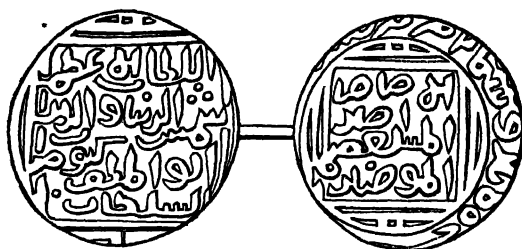
Mr. DELMERICK says:

"After the murder of Muíz-ud-din Kaikobad on the 18th Shavval A. H. 689 (October A. D. 1290), Jallal-ud-din Firoz, in order to gratify the people and silence the opposition of the army, having obtained possession of the murdered king's only child, an infant of three years of age, placed him upon the throne, and caused the Khutba to be read and coins to be struck in the name of Shams-ud-din Kaimurs, but a few days afterwards Firoz sent this child to follow his father Kaikobad, and Firoz himself ascended the throne of Delhi on Friday the 25th Zilhijja (December) of the same year.

"Firishtah says that Jallal-ud-din Firoz was guilty of no further acts of cruelty after the death of the young prince, but became distinguished for his humanity and benevolence.

"A coin of this unfortunate child, struck during his nominal reign, exists at Delhi and is in the possession of Pandit Rattan Narain, Názir of the Deputy Commissioner's Court.

"I subjoin a drawing and description of it—



Silver. Weight 167 gráins. Unique A. H. 6

Square areas.

الامام	السلطان الاعظم
المستعصم امير	شمس الدنيا والدين
المومنين	ابو المظفر كيومرث

Margin ضرب عدم * * * * * وستمائة

GENERAL CUNNINGHAM writes:

"I have seen this silver coin of *Shams-ud-din Kaimur* in the possession of Pandit Ratan Náráyan. It is genuine and unique. This young Prince is mentioned by Ziá-ud-din Barui by his title only: see Elliot's *Muhammadian Historians*, III, 133, 'The Sultan's child was seated on the throne, under the title of Sultán Shams-ud-din.' * * * 'The sons of Jalál-ud-din went publicly at the head of 500 horse to the royal palace, seized upon the infant Sultán, and carried him off to their fâther.' Ferishta notes that Jalál-ud-din, after he had been proclaimed king 'caused the young Prince to be put to death.'"

2. *On Relics from Ancient Persia in gold, silver and copper.*—By

GENERAL A. CUNNINGHAM, C. S. I., C. I. E.

(Abstract.)

In the year 1877, on the north bank of the Oxus, near the town of Takht-i-Kuwát, opposite Khulm and two days' journey from Kunduz, there was found a large treasure of gold and silver figures, ornaments and coins, most of which have been brought to India for sale. This paper gives a description of most of the articles found, and is illustrated with 9 plates. The coins, so far as General Cunningham has seen them, range over a period of about 800 years, from the time of Darius to that of Antiochus the Great and Euthydemus of Bactria. The gold and silver figures

also seem to belong to different ages, as some are decidedly archaic, more especially a small statuette of a king in silver which the author of the paper thinks may be as old as the time of Darius.

This paper will be published in full, with plates, in the Journal Pt. I, No. 3, for 1881.

3. *The Bon (Pon) Religion.*—By BABOO SARAT CHANDRA DÁS,
Deputy Inspector of Schools, Darjiling.

(Abstract.)

This paper is a literal translation of the 8th and 11th portions of the well-known Tibetan work, *Dub-thah Selkyi Melong*, written by the Lama *Je-tsun-lossang Ohhoikyi Nyima pal Ssangpo* about 1740 A. D. It contains a brief account of the history, sacred books, doctrines and ceremonies of the Bon religion, which anciently prevailed in Tibet, before the introduction of Buddhism. Three periods of the Bon religion are distinguished, called the Jola Bon, the Khyar Bon and the Gyur Bon respectively. During the Jola period, it appears to have been a kind of simple Shamaism; in the Khyar period, it was mixed up with the Saiva doctrine of the Tirthikas; in the Gyur period, it was largely assimilated to Buddhism, which had been introduced into Tibet in the meantime.

This paper will be published in full in the Journal, Pt. I, No. 3, for 1881.

4. *The Early History of Tibet*—By BABOO SARAT CHANDRA DÁS,
Deputy Inspector of Schools, Darjiling.

(Abstract.)

This paper contains an account of the earlier history of Tibet, compiled from original sources, such as the Debther-ngon-po, Chhojung, Ga-nag-gitsi, Ngon-gyi-yig-tshang-nying-pa, etc. It is divided into two Parts. The first part narrates the earliest history of Tibet, from 416 B. C. to 917 A. D. The second part relates its history in the Middle Ages, from 917 to 1645 A. D.

This paper will be published in full in the Journal, Pt. I, No. 3, for 1881.

LIBRARY.

The following additions have been made to the Library since the Meeting held in August last.

TRANSACTIONS, PROCEEDINGS AND JOURNALS,

presented by the respective Societies and Editors.

- Baltimore. American Journal of Mathematics,—Vol. III, No. 4.
 ———. American Journal of Philology,—Vol. II, No. 6.
 Batavia. Natuurkundig Tijdschrift voor Nederlandsch-Indië, Vol. XL.
 ———. Tijdschrift voor Indische Taal-, Land- en Volkenkunde,—Vol. XXVI, Nos. 3-6, Vol. XXVII, No. 1.
 ———. Bataviaasch Genootschap van Kunsten en Wetenschappen,—Notulen, Vol. XVIII, Nos. 1-4, 1880; Vol. XIX, Nos. 1-2, 1881.
 ———. ———. Verhandelingen,—Vol. XLI, No. 2.
 Berlin. K. preussische Akademie der Wissenschaften,—Monatsbericht, March, April and May 1881.
 Bombay. The Indian Antiquary,—Vol. X, Pts. 123-125, August-October 1881.
 ———. Bombay Branch, Royal Asiatic Society,—Journal, Vol. XV, No. 39, 1881, and Index to Vol. XIV, 1878-80.
 Bordeaux. Société de Géographie Commerciale,—Bulletin, Nos. 14-20.
 Budapest. Royal Hungarian Academy,—Etkönyvei, Vol. XVI, No. 6.
 ———. ———. Ertesítője Nos. 7-8, 1879; and Nos. 1-8, 1881.
 ———. ———. Ertekezések,—Vol. VIII, Nos. 5-10, 1879; Vol. IX, Nos. 1-2, 1880.
 ———. ———. Régi Magyar Költők Tára,—Vols. II and III, 1880-81.
 ———. ———. Literarische Berichte aus Ungarn,—Vol. IV, 1-4, 1880.
 ———. Ungarische Revue, Parts 1-4, 1881.
 ———. ———. Nyelvtudományi Közlemények,—Vol. XV, Part 3; Vol. XVI, Part 1.
 ———. ———. Almanach, 1881.
 Calcutta. Geological Survey of India,—Memoirs, Vol. XVIII, Part 3.
 ———. ———. Memoirs, Palæontologia Indica,—Series II, XI and XII, Vol. III, conclusion of Pt. 2; Series XIII, Vol. I, Part 3.
 ———. Original Meteorological Observations,—July-October 1881.
 Cherbourg. Société Nationale des Sciences Naturelles et Mathématiques,—Mémoires, Vol. XXII.

Dublin. Royal Irish Academy,—Proceedings (Polite Literature and Antiquities), Vol. II, Ser. II, No. 2, December 1880 : and (Science), Vol. III, Ser. II, Nos. 5 and 6, December 1880 and April 1881.

———. Transactions (Polite Literature and Antiquities), Vol. XXVII, June 1881 : and (Science), Vol. XXVIII, Parts 1-4. December 1880, February and March 1881.

Geneva. Museo Civico di Storia Naturali,—Annali, Vol. XVII.

Leipzig. Deutsche morgenländische Gesellschaft,—Abhandlungen für die Kunde des Morgenlandes, Vol. VII, No. 4.

Lisbon. Sociedade de Geographia,—Boletim, Second Series, No. 5.

Liverpool. Literary and Philosophical Society of Liverpool,—Proceedings, Vols. XXXIII and XXXIV.

London. The Academy,—Nos. 480-493.

———. The Athenæum,—Nos. 2803-2816.

———. Geological Society,—Quarterly Journal, Vol. XXXVIII, Parts 2-3.

———. Institution of Civil Engineers,—Minutes of Proceedings, Vols. LXIV and LXV.

———. Charter, By-Laws and Regulations, and List of Members, August 1st 1881.

———. Institution of Mechanical Engineers,—Proceedings, No. 2, April 1881.

———. Nature,—Vol. XXIV, Nos. 606, 611-617 and 619-624.

———. Royal Society,—Proceedings, Vol. XXXII, Nos. 212, 213, and 214.

No. 212. *Ferrier, David*, and *Ieo, G. F.*—The functional relations of the Motor Roots of the Brachial and Lumbo-Sacral Plexuses.

———. Philosophical Transactions,—Vol. CLXXI, Parts 2-3 ; Vol. CLXXII, Part 1.

———. List of Members,—30th Nov. 1881.

———. Royal Astronomical Society,—Monthly Notices, Vol. XLI, Nos. 7-8, May and June 1881.

———. Royal Asiatic Society,—Journal, Vol. XIII, Part 3.

———. Royal Geographical Society,—Proceedings, Vol. III, Nos. 7-8, July and August, 1881.

———. Royal Microscopical Society,—Journal, Vol. I (New Series), Parts 3-4.

———. Statistical Society,—Journal, Vol. XLIV, Part 2, June 1881.

———. Society of Telegraph Engineers,—Journal, Vol. X, No. 37.

———. Zoological Society,—Transactions, Vol. XI, Part 5.

———. Proceedings,—Parts 1-2, 1881.

Lyon. Société d'Agriculture,—Annales, Vol. II, 1879.

———. Société de Géographie,—Bulletin, Vol. IV, No. 21, 1881.

- Madras. Journal of Literature and Science for 1880.
- Moscow. Société Impériale des Naturalistes,—Bulletin, Nos. 3-4, 1880.
- Mozambique. Sociedade de Geographia,—Boletim, Nos. 1-4, June to September, 1881.
- Munich. Repertorium für Experimental-Physik,—Vol. XVII, Nos. 8-10.
- New Haven. American Oriental Society,—Journal, Vol. XII.
- . ———. Proceedings,—May 1881.
- Paris. Société Zoologique de France,—Bulletin, Parts 1-2, January to April, 1881.
- . Société d'Anthropologie,—Bulletin, Vol. IV, Part 1, January to February, 1881.
- Prague. Astronomische magnetische und meteorologische Beobachtungen, 1880.
- Rome. Società degli Spettroscopisti Italiani,—Memorie, Vol. X, Nos. 5-8, May to August, 1881.
- Roorkee. Professional Papers on Indian Engineering,—Vol. X, Nos. 41 and 41a.
- San Francisco. California Academy of Sciences,—Proceedings for June, 1881.
- Shanghai. North-China Branch of the Royal Asiatic Society,—Journal, No. 15, 1880.
- Stockholm. Kongliga Svenska Vetenskaps-Akademiens,—Handlingar, Vol. XIV, Pt. 2, 1876; Vol. XV, 1877; Vol. XVI, 1878; Vol. XVII, 1879.
- . ———. Meteorologiska Iakttagelser,—Vol. III, 1875; Vol. IV, 1876; Vol. V, 1877.
- Stuttgart. Verein für vaterländische Naturkunde,—Jahreshefte, 1881.
- Turin. Reale Accademia delle Scienze,—Memorie, Vols. XXXII and XXXIII.
- . ———. Atti,—Vol. XV, Nos. 1-8; Vol. XVI, No. 6.
- . Osservatorio della Regia Università,—Bollettino, 1879.
- Vienna. K. k. zoologisch-botanische Gesellschaft,—Verhandlungen, Vol. XXX, 1880.
- Washington. Smithsonian Miscellaneous Collections,—Vols. XVIII-XXI.
- . Smithsonian Contributions to Knowledge,—Vol. XXIII.
- Yokohama. Deutsche Gesellschaft für Natur-und Völkerkunde Ostasiens,—Mittheilungen, Heft XXIV, July 1881.
- . Asiatic Society of Japan,—Transactions, Vol. IX, Part 2.
- Zagreb. Arkeologickoga Društva,—Viestnik, Vol. III, No. 3, 1881.

BOOKS AND PAMPHLETS,

presented by the Authors.

- GODWIN-AUSTEN, LT.-COL. H. H. On the Land shells of the Island of Socotra collected by Professor Bayley Balfour. 8vo. London, 1881. Pam.
- MAN, E. H., and TEMPLE, LIEUT. R. C. Note on two Maps of the Andaman Islands. 8vo. London, 1881. Pam.
- MITRA, DR. RAJENDRALALA. Indo-Aryans: Contributions towards the Elucidation of their Ancient and Mediæval History. 2 Vols. 8vo. Calcutta, 1881.
- THOMAS, EDWARD. Bilingual Coins of Bukhara. 8vo., London, 1881, Pam.

MISCELLANEOUS PRESENTATIONS.

- Report of the Rent Law Commission, Vols. I and II. Fcp. Calcutta, 1881.
- Report on the Legal Affairs of the Bengal Government for the year 1880-81. Fcp. Calcutta, 1881.
- Administration Report of the Meteorological Reporter to the Government of Bengal for the year 1880-81. Fcp. Calcutta, 1881.
- Report on the Police of the Lower Provinces of the Bengal Presidency for the year 1880. Fcp. Calcutta, 1881.
- Report on the Law Revenue Administration of the Lower Provinces for the Official year 1880-81. Fcp. Calcutta, 1881.
- Report on Vaccination in the Province of Bengal for 1880-81. Fcp. Calcutta, 1881.
- Report on the Administration of the Salt Department for the year 1880-81. Fcp. Calcutta, 1881.
- Report on the Administration of the Registration Department in Bengal for the year 1880-81. Fcp. Calcutta, 1881.
- Supplement to the Report on Charitable Dispensaries under the Government of Bengal for the year 1880. Fcp. Calcutta, 1881.
- Records of the Geological Survey of India,—Vol. XIV, No. 3, 1881.

BENGAL GOVERNMENT.

- Magnetical and Meteorological Observations made at the Government Observatory, Bombay, 1871-78, 4to. Bombay, 1881.

BOMBAY GOVERNMENT.

- RIEU, CHARLES. Catalogue of the Persian Manuscripts in the British Museum. Vols. I-II. 4to. London, 1879-81.
- Catalogue of Oriental Coins in the British Museum. Vol. VI. 8vo. London, 1881.

Catalogue of the Birds in the British Museum. Vol. V. 8vo. London, 1881.
 Illustrations of Typical Specimens of Lepidoptera Heterocera in the collection of the British Museum. Part V. 4to. London, 1881.

BRITISH MUSEUM.

Annual Report of the Sanitary Commissioner of the Central Provinces for the year 1880. Fcp. Nagpur, 1881.

Report on the Vaccine Operations in the Central Provinces for 1880-81. Fcp. Nagpur, 1881.

Report on the Administration of the Central Provinces for the year 1880-81. 8vo. Nagpur, 1881.

CHIEF COMMISSIONER, CENTRAL PROVINCES.

DANIELSSEN, D. C., and KOREN, JOMAN. The Norwegian North Atlantic Expedition, 1876-78. Zoology :—Gephyrea. 4to. Christiana, 1881.

THE EDITING COMMITTEE.

Administration Report of the Government Central Museum for the year 1880-81. Fcp. Madras, 1881.

GOVERNMENT CENTRAL MUSEUM, MADRAS.

Notes on the Economic Products of the North-Western Provinces. Part V. 4to. Allahabad, 1881.

GOVERNMENT, N. W. P.

Popular Guide to the Geological collections in the Indian Museum, Calcutta. No. 1 :—Tertiary Vertebrate Animals, by R. Lydekker. No. 2 :—Minerals, by F. R. Mallet. No. 4 :—Palaeontological Collections, by Dr. O. Feistmantel. 8vo. Calcutta, 1879-81. Pam.

GEOLOGICAL SURVEY OF INDIA.

Review of the Forest Administration in the several Provinces under the Government of India, for the year 1879-80. Fcp. Simla, 1881.

MUELLER, MAX. Sacred Books of the East. Vols. X and XI. 8vo. Oxford, 1881.

The Indian Antiquary,—Vol. X, Parts 122-124, August to October, 1881.

Records of the Geological Survey of India,—Vol. XIV, Part 3, 1881.

HOME DEPARTMENT.

KUUN, COMES GE'ZA. Codex Cumanicus Bibliothecæ ad Templum divi Marci Venetiarum. Roy. 8vo. Buda-Pestini, 1880.

BUDENZ, J., SZARYAS, G., and SZILADY, A. Nyelvemléktár. Régi Magyar Codexek és Nyomtatványok. Vols. VII and VIII. 8vo. Buda Pest, 1881.

HUNGARIAN ACADEMY OF SCIENCES.

Indian Museum : Annual Report, List of Accessions, and selected Extracts of Minutes. April 1880 to March 1881, Vol. XII. Calcutta, 1881.

INDIAN MUSEUM.

ROWLAND, HENRY A. On the Mechanical Equivalent of Heat, with subsidiary researches on the variation of the mercurial from the air thermometer and on the variation of the specific heat of water. 8vo. Cambridge, 1880.

JOHNS HOPKINS UNIVERSITY.

DOZY, R. The History of the Almohades by Abdo-'l-Wāhid al-Marréko-shi. 2nd Edition. 8vo. Leyden, 1881.

MON. J. DE GOEJE.

Report on Public Instruction in the Madras Presidency for the year 1879-80. 8vo. Madras, 1880.

MADRAS GOVERNMENT.

Return of Wrecks and Casualties in Indian Waters for the year 1880. Fcp. Calcutta, 1881.

MARINE SURVEY DEPARTMENT.

Report on the Meteorology of India in 1879, 5th year. 4to. Calcutta, 1881.

Report on the Administration of the Meteorological Department of the Government of India in 1880-81. 4to. Calcutta, 1881.

METEOR. REPORTER TO THE GOVERNMENT OF INDIA.

GHAFUR, MUHAMMAD ABDUL. A complete Dictionary of the Terms used by Criminal Tribes in the Panjab, together with a short History of each Tribe, and the names and places of residences of individual members. 8vo. Lahore, 1879.

LEITNER, DR. G. W. Appendix. A detailed Analysis of Abdul Ghafur's Dictionary of the terms used by Criminal Tribes in the Panjab. Fcp. Lahore, 1880.

———. A sketch of the Changars and of their Dialect. Fcp. Lahore, 1880.

PUNJAB GOVERNMENT.

Results of Observations, January-June 1881.

ST. XAVIER'S COLLEGE OBSERVATORY.

De la Nomenclature des Êtres Organisés. 8vo. Paris, 1881.

SOCIÉTÉ ZOOLOGIQUE DE FRANCE.

G. V. Juggarow's Observatory, Daba Gardens, Vizagapatam. Results of Meteorological Observations, 1880. 8vo. Madras, 1881.

THE OBSERVATORY.

JOLIS, AUGUSTE LE. Catalogue de la Bibliothèque de la Société Nationale des Sciences Naturelles et Mathématiques de Cherbourg. Pt. I. 8vo. Cherbourg, 1881.

THE SOCIETY.

Katalog der Bibliothek der deutschen morgenländischen Gesellschaft, II. 8vo. Leipzig, 1881.

THE SOCIETY.

PERIODICALS PURCHASED.

Benzres. Fallon's New English-Hindustani Dictionary,—Parts IV and V.

Bombay. The Indian Antiquary,—Vol. X, Part 125, November 1881.

Boston. Society of Natural History,—Proceedings, Vols. X and XI.

Calcutta. Calcutta Review,—Vol. LXXIII, No. 146, October 1881.

———. Indian Medical Gazette,—Vol. XVI, Nos. 8-10, August to October, 1881.

Edinburgh. Edinburgh Review,—No. 315, July 1881.

Geneva. Archives des Sciences Physiques et Naturelles,—Vol. VI, Nos. 7-9.

Giessen. Jahresbericht über die Fortschritte der Chemie,—Part 1, 1880.

Göttingen. Gelehrte Anzeigen,—Nos. 29-40.

———. Nachrichten,—Nos. 11-13.

Leipzig. Annalen der Physik und Chemie,—Vol. XIII, Nos. 3-4; Vol. XIV, No. 1.

———. ———. Beiblätter,—Vol. V, Nos. 6-9.

———. Botanisches Centralblatt,—Vol. V, Nos. 1-13; Vol. VI, Nos. 1-13; Vol. VII, Nos. 1-7.

———. Literarisches Centralblatt,—Nos. 1-34, January to August, 1881.

London. Nineteenth Century,—Nos. 53-54, July and August, 1881.

———. Messenger of Mathematics,—Vol. XI, Nos. 1-3.

———. Journal of Botany,—Vol. X, Nos. 223-224, July and August, 1881.

———. Entomologist,—Vol. XIV, Nos. 218-219, July and August, 1881.

———. Entomologist's Monthly Magazine,—Vol. XVIII, Nos. 206-207, July and August, 1881.

———. Annals and Magazine of Natural History,—Vol. VIII, Nos. 43-44, July and August, 1881.

———. London, Edinburgh and Dublin Philosophical Magazine,—Vol. XII, Nos. 72-73, July and August, 1881.

———. Journal of Science,—Vol. III, Nos. 91-92, July and August, 1881.

———. Publishers' Circular,—Vol. XLIV, Nos. 1052-1057.

———. Chemical News,—Vol. XLIV, Nos. 1129-1142.

———. Society of Arts,—Journal, Vol. XXIX, Nos. 1495-1508.

———. The Ibis,—Vol. V, No. 19, July 1881.

———. Journal of Conchology,—Vol. III, No. 6, April 1881.

———. Mind,—No. 23, July 1881.

———. Numismatic Chronicle,—Vol. I, Part 1, 1881.

———. Quarterly Journal of Microscopical Science,—Vol. XXI, No. 83, July 1881.

- London. Quarterly Journal of Pure and Applied Mathematics,—Vol. XV^{II}, No. 69, June 1881.
- . Quarterly Review,—No. 303, July 1881.
- New Haven. American Journal of Science,—Vol. XXI, Nos. 125-126, May and June, 1881; Vol. XXII, Nos. 127-128, July and August, 1881.
- Paris. Annales de Chimie et de Physique,—Vol. XXIII, July and August, 1881; Vol. XXIV, September and October, 1881.
- . Journal Asiatique,—Vol. XVII, No. 3, April to June 1881.
- . Comptes Rendus,—Vol. XCIII, Nos. 1-14.
- . Revue Scientifique,—Vol. XXVIII, Nos. 3-16.
- . Revue Critique,—Vol. XI, No. 23, and Index; Vol. XII, Nos. 28-41.
- . Revue des deux Mondes,—Vol. XLVI, Nos. 2-4; Vol. XLVII, Nos. 1-2.
- . Revue de Linguistique,—Vol. XIV, No. 3.
- . Journal des Savants,—July to August, 1881.
- Philadelphia. Tryon's Manual of Conchology,—Vol. III, Part 11.

BOOKS PURCHASED.

- A Dictionary of the Panjabi Language, prepared by a Committee of the Lodiana Mission. 4to. Lodiana, 1854.
- BALFOUR, FRANCIS M. A Treatise on Comparative Embryology. Vol. II. 8vo. London, 1881.
- EDWARDS, H. MILNE. Leçons sur la Physiologie et l'Anatomie Comparée de l'Homme et des Animaux. Vols. X-XIV. 8vo. Paris, 1874-81.
- EDALJI, SHÁPURJI. A Dictionary, Gujarátí and English. 8vo. Bombay, 1868.
- FERGUSSON, JAMES. Tree and Serpent Worship, or Illustrations of Mythology and Art in India in the First and Fourth Centuries after Christ. From the Sculptures of the Buddhist Topes at Sanchi and Amravati. Second Edition. 4to. London, 1873.
- HOUSSEAU, J. C., and LANCASTER, A. Bibliographie Générale de l'Astronomie. Vol. II, Fasc. 3. 8vo. Bruxelles, 1881.
- HUXLEY, THOMAS H. A Manual of the Anatomy of Vertebrated Animals. 8vo. London, 1871.
- . A Manual of the Anatomy of Invertebrated Animals. 12mo. London, 1877.
- JUDD, JOHN W. Volcanoes: what they are and what they teach. 12mo. London, 1881.
- MOHL, JULES. Vingt-sept ans d'Histoire des Etudes Orientales. Rapports faits à la Société Asiatique de Paris de 1840 à 1867. 2 Vols. 8vo. Paris, 1879-80.

SENART, E'. Les Inscriptions de Piyadasi. Vol. I. 8vo. Paris, 1884.

SHEERING, REV. M. A. Hindu Tribes and Castes, as represented in Benares. Vol I. 4to. London, 1872.

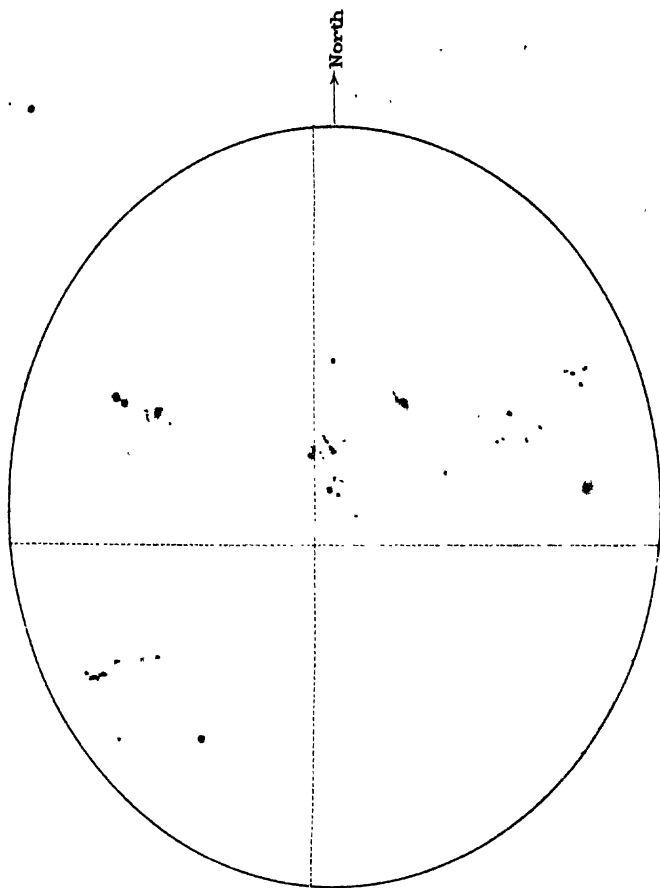
SULLY, JAMES. Illusions: a Psychological Study. 12mo. London, 1881.

THOMSON, SIR C. WYVILLE. Report on the Scientific Results of the Voyage of H. M. S. "Challenger" during the years 1873-76; under the Command of Captain George S. Nares, R. N., F. R. S., and Captain Frank Turle Thomson, R. N. Zoology: Vols. I-II. 4to. London, 1880-81.

TOD, LT.-COL. JAMES. Travels in Western India, embracing a visit to the Sacred Mounts of the Jains and the most Celebrated Shrines of Hindu Faith between Rajputana and the Indus; with an Account of the Ancient City of Nehrwalla. 4to. London, 1839.

WATTS, HENRY. A Dictionary of Chemistry. Third Supplement, Part II. 8vo London, 1881.

ZIMMER, HEINRICH. Altindisches Leben. Die Cultur der Vedischen Arier nach den Samhita dargestellt. 8vo. Berlin, 1879.



Tracing from Sun Negative taken at Dehra Observatory, Great Trigonometrical Survey of India.

Latitude $30^{\circ}19'29''$ N. Longitude $78^{\circ}5'42''$ E. Height above Sea 2232 feet, on July 25th 1881, at 4h.-47m. P.M., local apparent time.

Spots visible in previous Negative taken on the same day at 3h.-58m. P.M., are shewn in *Black*.

And the new spots which appeared between 4 and 5 P.M., are shewn in *Red*.

PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL.
FOR DECEMBER, 1881.

The Monthly General Meeting of the Asiatic Society of Bengal was held on the 7th of December at 9 P. M.

The HON'BLE H. J. REYNOLDS, Vice-President, in the Chair.

The minutes of the last Meeting were read and confirmed.

The following presentations were announced :—

1. From the Home Department,—Oldenberg's *Vinayapitakam*, Vol. III.
2. From the Home Department, Forest Branch,—(1) Report of a visit to the Torrent Regions of the Hautes and Basses Alpes, and also to Mount Faron, Toulon, by E. McA. Moir,—(2) Suggestions regarding the management of the leased Forests of Busáhir in the Sutlej Valley of the Panjab, by Dr. D. Brandis.

3. From Raja Sourindro Mohun Tagore,—A set of his works in English, Sanskrit, Bengali and Hindi.

4. From the Authors,—(1) The adoption of a Prime Meridian to be common to all nations. The establishment of Standard Meridians for the Regulation of Time, by Sandford Fleming,—(2) An Address to the Fifth International Oriental Congress, 1881, by Dr. Ram Das Sen,—(3) *Versuch einer Erklärung der auf einer Gemme im Besitze des Grafen S. Stroganov befindlichen Pehlewi-Inschrift*, by B. Dorn,—(4) *The Epoch of the Guptas*, by Edward Thomas,—(5) *On the Land-shells of the Island of Socotra collected by Prof. I. Bayley Balfour, Pt. II*, by Lieut.-Col. H. H. Godwin-Austen,—(6) *Readings from the Arian Pali*, by Dr. A. F. R. Hoernle.

5. From the Superintendent, Marine Survey Department,—*Chart of Curves of Equal Magnetic Variation in the Indian Ocean for 1880*.

6. From the Surveyor General of India,—(1) A copy of the 5th Edition of the *Map of Turkestan, and the countries between the British and Russian Dominions in Asia*,—(2) *Synopsis of the Results of the Opera-*

tions of the Great Trigonometrical Survey of India, Vols. X, XI, XII, and XIII.

7. From the Government of Bengal,—Brief Summary of the Meteorology of Bengal, 1880.

The following Gentlemen, duly proposed by the Council at the last meeting, were ballotted for and elected Honorary Members of the Society :

1. Dr. William Wright.
2. Dr. Rudolph v. Roth.
3. Sir William Thomson.
4. Prof. Hermann L. F. Helmholtz.

The following Gentlemen, duly proposed and seconded at the last meeting, were ballotted for and elected Ordinary Members of the Society :

- R. Logan, Esq.
J. J. Monteath Esq., M. D.

The following Gentleman is a candidate for ballot at the next meeting :

Babu Girijabhushana Mukerji, M. A., proposed by Babu Protapa Chandra Ghosha, seconded by J. Wood-Mason, Esq.

The SECRETARY reported that the following Gentlemen had intimated their desire to withdraw from the Society :

- Major M. Protheroe.
Herr W. Joest.
Munshi Ganga Pershad.

The following papers were read—

1. *A numerical Estimate of the Species of Animals, chiefly Land and Freshwater, hitherto recorded from British India and its Dependencies.*—By WILLIAM T. BLANFORD, F. R. S.

(Abstract.)

This paper is an attempt to obtain a rough estimate of the number of species belonging to the animal kingdom hitherto recorded in British India and its Dependencies. The marine fauna inhabiting the seas around India being very imperfectly known, Mr. Blanford has confined himself, in all the sub-kingdoms except the Vertebrata, to the land and freshwater fauna alone. Although the data obtained are very imperfect, Mr. Blanford publishes them because they lead to some very curious results. The number of recorded species in each order of the various classes is given, together with the authorities from whom the data have been collected : and from this a final table giving the number of species in each class is compiled.

On this Mr. Blanford remarks: "The figures given are, I believe, a fair approximation to the truth, and the result is one that I think should make Anglo-Indian naturalists endeavour to improve our knowledge of the fauna. It is scarcely creditable that, in a perfectly accessible country, with facilities for travelling and for living in different parts of the area unrivalled within the tropics, we should remain so ignorant of the zoology. It is ridiculous to suppose that the Indian *Coleoptera* are scarcely more numerous than the *Lepidoptera*, that the *Hymenoptera* (which very probably rival, and may excel, each of the other orders) are only between $\frac{1}{5}$ and $\frac{1}{2}$ as numerous, or that the *Neuroptera*, of which, Mr. McLachlan tells me, about 1000 are known from Europe, are only represented by 350 species. As to the spiders, it is no exaggeration to say that in most parts of India 108 species (which is the total number hitherto described for the whole of India) might be collected in a few days' search. It is to be hoped that the next 5 years will witness a very considerable increase in our knowledge of the fauna of India."

This paper will be printed in full in the Journal, Part II, No. 4, for 1881.

2. *Notes on an apparently undescribed Varanus from Tenasserim, and on other Reptilia and Amphibia.*—By W. T. BLANFORD, F. R. S.

(Abstract.)

This paper gives a detailed description of a *Varanus* found in Tenasserim in the neighbourhood of Tavoy, which Mr. Blanford cannot identify with any known species. It may be immediately distinguished from all other Indian forms by its peculiar nostril, situated in a single scale, by the larger scales on the upper part of the body, and especially by the scales of the nape being larger than those above the head, or those on the back. There is also a description of a cobra differing in colour and to some slight extent in structure from any Indian form known to Mr. Blanford, the colouration being remarkably similar to that in the Central Asiatic type described by Eichwald under the name of *Tomyris oxiana*. This snake was found in Gilgit where several birds and mammals belonging to Central Asiatic types occur.

The paper also contains notes on specimens of *Draco taniopterus* found near Tavoy in Tenasserim, and on a species of *Pseudophidian*, *Ichthyophis Glutinosus*, found near Darjeeling, being the first *Pseudophidian* recorded from the Himalayas.

This paper will be published in full in the Journal, Pt. II, No. 4, for 1881.

3. *Description of a new Species of Rostellaria, from the Bay of Bengal.*—By GEOFFREY NEVILL, C. M. Z. S.

This paper contains a description of a highly interesting and very characteristic form, quite unlike any of the other seven known living species of the genus, which was dredged in deep water off Cheduba, Arrakan Coast, by Surgeon J. Armstrong, late Naturalist to the Indian Marine Survey.

It will be published in full in the Journal, Pt. II, No. 4, for 1881.

4. *Description of a new Species of the Lepidopterous genus Euripus from North Eastern India.*—By J. WOOD-MASON, Deputy Superintendent, Indian Museum, Calcutta.

This paper will be published in full in the Journal, Pt. II, No. 4. for 1881.

LIBRARY.

The following additions have been made to the Library since the Meeting held in November last.

TRANSACTIONS, PROCEEDINGS AND JOURNALS,

presented by the respective Societies and Editors.

Berlin. K. preuss. Akad der Wissenschaften, Monatsbericht, June 1881.

Bombay. Royal Asiatic Society,—Journal, Vol. X, No. 28, 1871-72.

Bordeaux. Société de Géographie Commerciale, Bulletin, No. 21, 7th November 1881.

Calcutta. Geological Survey of India,—Memoirs, Vol. XVIII, Part 2.

Dresden. Kais. Leopoldinisch—Carolinische Deutsche Akademie der Naturforscher,—Nova Acta, Vol. XLI, Parts 1-2.

Leipzig. Deutsche morgenländische Gesellschaft,—Zeitschrift, Vol. XXXV, Parts 2 and 3.

Lisbon. Sociedade de Geographia,—Boletim, Second Series, No. 6.

Colonias portuguezas em paiz Estrangeiro. VIII. Em Marrocos, pelo consul geral e encarregado de negocios José Daniel Colaço.

London. The Academy,—Nos. 494-497.

———. The Athenæum,—Nos. 2817-2820.

———. Linnean Society,—Journal, Botany, Vol. XVIII, Nos. 108-113.

No. 108. Murray, Geo.—On the application of the Results of Pringsheim's recent Researches on Chlorophyll to the Life of the Lichen.

No. 109. Brown, N. E.—On some new *Aroidæ*; with Observations on other known forms :—Part I.

No. 110. Bentham, Geo.—Notes on *Orchideæ*.

No. 111. Watt, Geo.—Notes on the Vegetation, &c., of Chumba State and

British Lahoul; with Descriptions of new species. *Darwin, Francis*.—The Theory of the Growth of Cuttings; illustrated by observations on the Bramble, *Rubus fruticosus*.

No. 112. *Darwin, Francis*.—On the power possessed by Leaves of placing themselves at Right Angles to the direction of Incident Light. *Bidie, William*.—Remarks on the Indian Coffee-Leaf disease. *Cooke, M. C.*—The Coffee Disease in South America. *Clarke, C. B.*—On Right-hand and Left-hand Contortion.

No. 113. *Masters, Maxwell T.*—On the Conifers of Japan. *Clarke, C. B.*—On *Arnebia* and *Macrotomia*.

London. Linnean Society.—Journal, Zoology, Vol. XV, Nos. 84-85.

No. 84. *Carpenter, P Herbert*.—On the Genus *Solanocrinus*, Goldfuss, and its Relations to recent *Comatule*. *Watson, Rev. Robert Boog*.—Mollusca of H. M. S. 'Challenger' Expedition.—Part VI. *Turritellidae*.

No. 85. *Macdonald, John Denis*.—On the Classification of *Gasteropoda*. Part II. *Watson, Rev. Robert Boog*.—Mollusca of H. M. S. 'Challenger' Expedition.—Part VII.

———. ———. Transactions,—Zoology, Vol. II, Part 2.

Collingwood, Cuthbert.—On some new species of Nudibranchiate Mollusca from the Eastern Seas. *Jabcock, Sir John*.—On the Anatomy of Ants. *Haddon, Alfred C.*—On the Extinct Land Tortoises of Mauritius and Rodriguez.

———. ———. List of the Linnean Society, January, 1881.

———. Nature,—Vol. XXIV, Nos. 625-626; Vol. XXV, Nos. 627-628.

———. Royal Geographical Society,—Proceedings,—Vol. III, No. 9, September, 1881.

Stewart, Lt.-Col. C. E.—The Country of the Tekke Turkomans, and the Tejend and Murghab Rivers.

Mozambique. Sociedade de Geographia,—Boletim, No. 5, October, 1881.

Munich. Repertorium für Experimental-Physik, Vol. XVII, Nos. 11 and 12.

Weber, W. and Zollner, F.—Elektrodynamische Widerstandsmessungen nach absolutem Maasse. *Puluj, Dr. J.*—Strahlende Elektrodenmaterie.—Neue Methode zur Bestimmung der magnetischen Declination auf Reisen nach Dom. Ragona.

Roma. Società degli Spettroscopisti Italiani,—Memorie, Vol. X, No. 9, September 1881.

Fievez, Ch.—Recherches sur l'élargissement des raies spectrales de l'hydrogène. *Fievez, Ch.*—Note sur l'analyse de la lumière de la comète de (d) 1881. *Groneman, H. I. H.*—Recherches sur la nature de la lumière zodiacale.

Schaffhausen. La Société Entomologique Suisse,—Bulletin, Vol. VI, No. 4.

Simla. United Service Institution of India,—Journal, Vol. X, No. 48.

Stockholm. Kongliga Svenska Vetenskaps-Akademiens Förhandlingar,—Ofversigt, Vols. XXXIV-XXXVII, 1877-80.

Stockholm. Kongliga Svenska Vetenskaps-Akademiens,—Bihang, Vol. IV, Pts. 1 and 2; Vol. V, Parts 1 and 2.

———. Beskyddare Hans Maj. T. Konungen, May 1878 to May 1881.

———. Lefnadsteckningar, Vol. II, Part 1.

Zágreb. Arkeologickoga Druzstva,—Viestnik, Vol. III, No. 4.

BOOKS AND PAMPHLETS,

presented by the Authors.

DOEN, B. Versuch einer Erklärung der auf einer Gemme im Besitze des Grafen S. Stroganov befindlichen Pehlewi-Inschrift. 4to. St. Petersburg, 1881.

FLEMING, SANDFORD. The adoption of a Prime Meridian to be common to all nations. The establishment of Standard Meridians for the regulation of time. Read before the International Geographical Congress at Venice, September 1881. 8vo. London, 1881. Pam.

GODWIN-AUSTEN, LT.-COL. H. H. On the Land-shells of the Island of Socotra collected by Prof. I. Bayley Balfour. Part II. 8vo. London, 1881. Pam.

HOERNLE, DR. A. F. R. Readings from the Arian Páli. 16mo. Bombay, 1881. Pam.

SEN, DR. RAM DAS. An Address to the Fifth International Oriental Congress, 1881. 8vo. Calcutta, 1881. Pam.

TAGORE, SOURINDRO MOHUN. A Brief Account of the Tagore Family. 8vo. Calcutta, 1868.

———. Short Notices of Hindu Musical Instruments. 32mo. Calcutta, 1877.

———. A few Lyrics of Owen Meredith set to Hindu Music. 8vo. Calcutta, 1877.

———. Six Principal Rágas, with a Brief View of Hindu Music. 4to. Calcutta, 1877.

———. Fifty Tunes composed and set to music. 8vo. Calcutta, 1878.

———. A Vedic Hymn. Fcp. Calcutta, 1878.

———. A few specimens of Indian Songs. 8vo. Calcutta, 1879.

———. Mani-Málá, or a Treatise on Gems, Parts I and II. 8vo. Calcutta, 1879-81.

———. Vení-Sanhára Náataka, or the Binding of the Braid, a Sanskrit Drama by Bhatta-Náráyana, done into English. 8vo. Calcutta, 1880.

———. Roma-Kavya, or a short sketch of Roman History, from the Earliest Days of Antiquity to the present time, in Sanskrit versè. 8vo. Calcutta, 1880.

———. Eight Tunes, composed by. 8vo. Calcutta, 1880.

TAGORE, SOURINDEO MOHUN. *The Eight Principal Rasas of the Hindus, with Murtti and Vrindaka, or Tableaux and Dramatic Pieces illustrating their character.* 4to. Calcutta, 1880.

———. *The Ten Principal Avatárs of the Hindus, with a short history of each incarnation and directions for the representation of the Múrttis as Tableaux Vivants.* 4to. Calcutta, 1880.

———. *The Dramatic Sentiments of the Aryas.* 8vo. Calcutta, 1881.

———. *The Five Principal Musicians of the Hindus, or a brief exposition of the Essential Elements of Hindu Music, as set forth by the five Celestial Musicians of India, an offering to the Fifth International Congress of Orientalists, to be held at Berlin in September 1881.* 4to. Calcutta, 1881.

THOMAS, EDW. *The Epoch of the Guptas.* Pamphlet, 8vo. London, 1881.

MISCELLANEOUS PRESENTATIONS.

The Indian Forester, Vol. VII, No. 2, October 1881. 8vo. Calcutta, 1881.

Report on the External Trade of Bengal with Nepal, Sikkim and Bhutan, for the year 1880-81. Fcp. Calcutta, 1881.

Report on the Administration of the Customs Department in the Bengal Presidency for the official year 1880-81. Fcp. Calcutta, 1881.

Annual Report on Emigration from the Port of Calcutta to British and Foreign Colonies for 1880-81. Fcp. Calcutta, 1881.

Brief Summary of the Meteorology of Bengal, 1880. Fcp. Calcutta, 1881.

BENGAL GOVERNMENT.

The Indian Antiquary, Vol. X, Part 125, November 1881. 4to. Bombay, 1881.

Fallon's New English-Hindustani Dictionary, Part V, September 1881. 8vo. Benares, 1881.

MOIR, E. McA. *Report of a visit to the Torrent Regions of the Hautes and Basses Alpes, and also to Mount Faron, Toulon.* Fcp. Calcutta, 1881.

OLDENBERG, DR. H. *The Vinayapitakam*, Vol. III. 8vo. London, 1881.

BRANDIS, DR. D. *Suggestions regarding the management of the leased Forests of Busahir in the Sutlej valley of the Punjab.* Fcp. Simla, 1881.

HOME DEPARTMENT.

Annual Report on the Civil Hospitals and Dispensaries in the Madras Presidency for the year 1880. Fcp. Madras, 1881.

Annual Medical Report of the Madras Government Lying-in Hospital for the year 1880. Fcp. Madras, 1881.

MADRAS GOVERNMENT.

Synopsis of the Results of the Operations of the Great Trigonometrical Survey of India, Vols. X, XI, XII and XIII. 4to. Dehra Dun, 1880.
SURVEY OF INDIA.

PERIODICALS PURCHASED.

- Calcutta. Indian Medical Gazette,—Vol. XVI, No. 11, November 1881.
——. Stray Feathers,—Vol. IX, Nos. 5 and 6, 1880.
Geneva. Archives des Sciences Physiques et Naturelles,—Vol. VI, No. 10.
 Pringsheim.—Recherches sur le rôle de la chlorophylle dans les végétaux.
Göttingen. Gelehrte Anzeigen,—Nos. 41-44.
Leipzig. Annalen der Physik und Chemie,—Vol. XIV, No. 10.
——. ———. Beiblätter,—Vol. V, No. 10.
——. Botanisches Centralblatt,—Vol. VII, Nos. 8-10.
——. Literarisches Centralblatt,—Nos. 35-38.
London. Annals and Magazine of Natural History,—Vol. VIII, No. 45, September 1881.
 Bate, C. Spence.—On the *Penæidea*. *Miers, Edward J.*—On a collection of Crustacea made by Baron Hermann-Maltzam at Goree Island, Senegambia.
 Smith, Edgar A.—Remarks upon Mr. Wood-Mason's Paper "On the Discrimination of the Sexes in the Genus *Puludina*." *Carter, H. J.*—On *Spongiophaga* in *Spongilla*. *Scully, J.*—On some Mammals from Kandahar.
——. Chemical News,—Vol. XLIV, Nos. 1143-1146.
 No. 1144. *Braham, Philip*.—On Crystals produced by the Action of Metals sealed up in Carbon Disulphide.
——. Entomologist,—Vol. XIV, No. 220, September 1881.
——. Entomologist's Monthly Magazine,—Vol. XVIII, No. 208, September 1881.
 Hellins, Rev. J.—On the variable number of moults in larvæ from the same batch of eggs.
——. Journal of Botany,—Vol. X, No. 225, September 1881.
——. Journal of Science,—Vol. III, No. 93, September 1881.
 Slater, J. W.—On *Diptera* as Spreaders of Disease.
——. London, Edinburgh and Dublin Philosophical Magazine,—Vol. XII, No. 74, September 1881.
 Gray, Thomas.—On Instruments for measuring and Recording Earthquake-Motions.
——. Messenger of Mathematics,—Vol. XI, No. 4, August 1881.
 Coz, H.—On the distance of rainbows.
——. Nineteenth Century,—No. 55, September 1881.
 Bevington, Louisa S.—How to eat bread. *Laveleye, Émile de*.—The future of gold.
——. Publishers' Circular,—Vol. XLIV, Nos. 1058-1059.

London. Quarterly Journal of Pure and Applied Mathematics,—Vol. XVII, No. 68.

———. Society of Arts,—Journal, Vol. XXIX, Nos. 1509-1512.

No. 1509. *Carter, R. Brudenell*.—Cantor Lectures :—Colour Blindness.

Paris. Comptes Rendus,—Vol. XCIII, Nos. 15-18.

No. 15. *Avignon*.—Sur l'emploi du goudron, comme préservatif contre le Phylloxera. Note concernant l'utilisation des eaux mères des marais salants pour les bains destinés à la liquation du soufre, dans leur procédé d'extraction industrielle de ce corps. *Coggia*.—Comète découverte par M. Denning, le 4 Octobre 1881 ; observation faite à l'Observatoire de Marseille. *Lalagade, G. de*.—Sur les bruits qui se produisent dans un circuit téléphonique, par les temps d'orage. *Yung, E.*—De l'innervation du cœur et de l'action des poisons chez les Mollusques lamellibranches. *Sudour, E. and Caraven-Cachin, A.*—Empoisonnement par les graines de l'*Euphorbia lathyris* (L.), et nouvelles expériences sur leur usage thérapeutique.

No. 17. *Bell, Al. Graham*.—Sur un appareil permettant de déterminer, sans douleur pour le patient, la position d'un projectile de plomb ou d'autre métal dans le corps humain. *Laveran, A.*—De la nature parasitaire des accidents de l'impaludisme. *Letellier, A.*—Note sur les précautions à prendre pour éviter les falsifications du lait. *Duponchel*.—Note concernant l'influence du mouvement des grosses planètes dans la périodicité des taches Solaires.

———. Journal des Savants,—October 1881.

———. Revue Critique,—Vol. XII, Nos. 42-45.

———. Revue des deux Mondes,—Vol. XLVII, No. 4 ; and Vol. XLVIII, No. 1.

No. 4. *Janet, Paul*.—La Philosophie de la Croyance, à l'occasion d'un livre récent. *Lasègue, Ch.*—Le Braidisme. *Brunetière, F.*—La Déformation de la Langue par l'Argot, à propos de livres récents.

———. Revue de Linguistique,—Vol. XIV, 15th October 1881.

———. Revue Scientifique,—Vol. XXVIII, Nos. 17-20.

BOOKS PURCHASED.

BENFEY, TH. *Vedica und Linguistica*. 12mo. Strassburg, 1880.

CUSHING, J. N. *A Shan and English Dictionary*. 8vo. Rangoon, 1881.

GESENIUS, GUIL. *Scripturæ Linguaeque Phœnicæ monumenta quot quot supersunt*. 4to. Lipsiæ, 1837.

GOLDSMID, MAJ.-GEN. SIR F. J. *James Outram : a Biography*, 2 Vols. 8vo. London, 1881.

LOW, CHARLES RATHBONE. *The Afghan War, 1838-42, from the Journal and Correspondence of the late Major-General Augustus Abbott*. 8vo. London, 1879.

OLDFIELD, HENRY A. *Sketches from Nipal, Historical and Descriptive, with Anecdotes of the Court Life and Wild Sports of the Country in the*

time of Maharaja Jung Bahadur, G. C. B., to which is added an Essay on Nepalese Buddhism, and illustrations of Religious Monuments, Architecture, and Scenery from the Author's own Drawings. 2 Vols. 8vo.

¹ London, 1880.

PALMER, E. H. The Arabic Manual, comprising a condensed Grammar of both the Classical and Modern Arabic ; reading lessons and exercises, with analyses ; and a vocabulary of useful words. 12mo. London, 1881.

SHADWELL, LIEUT.-GENL. LAWRENCE. The Life of Colin Campbell, Lord * Clyde. Illustrated by extracts from his Diary and Correspondence. 2 Vols. 8vo. London, 1881.

TOD, LIEUT.-COL. JAMES. Annals and Antiquities of Rajasthan, or the Central and Western Rajpoot States of India. 2 Vols. Second Edition. (Reprint.) 4to. Calcutta, 1877-79.

TYNDALL, JOHN. Essays on the Floating Matter of the Air in relation to Putrefaction and Infection. 8vo. London, 1881.

WHEELER, J. TALBOYS. The History of India from the Earliest Ages. Vol. IV, Pt. 2. 8vo. London, 1881.

JOURNAL
OF THE
ASIATIC SOCIETY OF BENGAL.



VOL. XLIX.

PART I. (HISTORY, ANTIQUITIES, &c.)

(Nos. I to IV.—1880: with 22 Plates and 2 Maps.)

EDITED BY

THE PHILOLOGICAL SECRETARY.

~~~~~

"It will flourish, if naturalists, chemists, antiquaries, philologers, and men of science in different parts of *Asia*, will commit their observations to writing, and send them to the Asiatic Society at Calcutta. It will languish, if such communications shall be long intermitted; and it will die away, if they shall entirely cease." SIR WM. JONES.

~~~~~

CALCUTTA:

PRINTED BY J. W. THOMAS, AT THE BAPTIST MISSION PRESS,

AND PUBLISHED BY THE

ASIATIC SOCIETY, 57, PARK STREET.

1880.

CONTENTS

OF

JOURNAL, ASIATIC SOCIETY OF BENGAL, VOL. XLIX, PART I,

FOR 1890.

No. I.	Page
Description of the Great Śiva Temple of Gangai Kondapuram and of some other places in the Trichinopoli District.—By LIEUT.-COL. B. R. BRANFILL, (with a Plate),	1
Rude Megalithic Monuments in North Arcot.—By LIEUT.-COL. B. R. BRANFILL, (with a Plate),	8
The Coins of the Mahārājahs of Kāngra.—By C. J. RODGERS, (with a Plate),	10
Note on an Inscription found upon a stone lying near the ruins of a Masjid on Lanka Island, Wular Lake, Kashmīr.—By MAJOR H. S. JARRETT,	16
Coins on the Sunga or Mitra Dynasty, found near Rāmanagar or Ahichhatra, the ancient Capital of North Panchāla, in Rohilkhand:—the property of H. RIVETT-CARNAC, Esq., C. S. I., F. S. A., &c. Described by A. C. CARLLEYLE of the Archaeological Survey of India, (with a Plate),	21
Coins of Ghíās-ud-dín and Mu'az-ud-dín bin Sám.—By C. R. STUPL-NAGEL, M. R. A. S., (with a Plate),	29
No. II.	
A Collection of Hindí Roots, with Remarks on their Derivation and Classification.—By DR. A. F. RUDOLF HOERNLE, (with an Appendix, containing an Index of Sanskrit roots and words, occurring in the Collection),	53
Coins supplementary to Thomas' Chronicles of the Pathán kings of Dehli.—By C. J. RODGERS, (with two Plates),	81
Memorandum by H. RIVETT-CARNAC, C. S., C. I. E., F. S. A., on Coins of the Sunga Dynasty, (with 3 Plates),	87

No. III.

Remarks on the Afgháns found along the Route of the Tal Chotiali Field Force, in the Spring of 1879. Part I.—By LIEUT. R. C. TEMPLE, B. S. C., F. R. G. S., M. R. A. S., &c., (with three Plates, and two maps),	91
On the Súr্যaprajñapti. Part I.—By DR. G. THIBAUT, Principal, Benares College,	107
Memorandum on Clay Discs called “Spindle Whorls” and Votive Seals found at Sankisa, Behar, and other Buddhist ruins in the North Western Provinces of India.—By H. RIVETT-CARNAC, Esq., C. S., C. I. E., F. S. A., (with three Plates),	127
Supplementary Memorandum.—By the same, (with a Plate),	137
Note on some Copper Buddhist Coins.—By H. RIVETT-CARNAC, C. S., C. I. E., F. S. A., (with two Plates),	138

No. IV.

Remarks on the Afgháns found along the route of the Tal Chotiali Field Force, in the Spring of 1879. Part II.—By LIEUT. R. C. TEMPLE, B. S. C., F. R. G. S., M. R. A. S., &c., (with 3 Plates and 2 Maps),	143
On the Súr্যaprajñapti. Part II.—By DR. G. THIBAUT, Principal, Benares College,	181
Coins supplementary to Thomas’ “Chronicles of the Pathán kings of Dehli.”—By CHAS. J. RODGERS, (with two Plates),	207
Copper Coins of Akbar.—By CHAS. J. RODGERS, Amritsar, (with two Plates),	213



LIST OF PLATES

IN

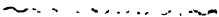
JOURNAL, ASIATIC SOCIETY OF BENGAL, PART I,

FOR 1880.

- Pl. I (pp. 5, 8). Rude Monuments in Arcot.
Pl. II (p. 14). Coins of the Mahárájahs of Kágra.
Pl. III (p. 24). Coins of the Mitra Dynasty.
Pl. IV (p. 28). Coins of Ghiás-ud-dín and Mu'az-ud-dín bin Sâm.
Pls. V & VI (pp. 81, 84). Coins supplementary to Thomas' Chronicles of the Paṭhán kings of Dehli.
Pls. VII, VIII, IX (pp. 87-90). Coins of the Mitra or Sunga Dynasty.
Pls. X, XI, XII (pp. 155-163). Sketches from Afghánistán.
Pls. XIII, XIV, XV^a (pp. 127, 137). Spindle Whorls, &c., found at Sankisa, Behar and other Buddhist Ruins.
Pl. XV (p. 135). Clay Seals, &c., found at Sankisa.
Pls. XVI, XVII (p. 138). Copper Buddhist Coins.
Pls. XVIII, XXXIII^a (pp. 208, 210). Coins supplementary to Thomas' Chronicles of the Paṭhán kings of Dehli.
Pls. XIX, XX (p. 213). Copper Coins of Akbar.
Maps, Nos. 1 & 2, (p. 92). Sketch Map of the March of the Tal Chotiali Field Force.

ERRATA.

Page 207, line 2, *read* (With two Plates
„ 208, „ 7, „ Plate XVIII.
„ 209, „ 1, „ Plate XVIII, *a*.
„ 210, „ 11, „ Plate XVIII, *a*.



I N D E X

TO

JOURNAL, ASIATIC SOCIETY OF BENGAL, VOL. XLIX,

PART I, FOR 1880.

AFGHANS along the Route of the Tal
Chotiali Field Force, pp. 91, 141
Agni-mitra, coins of, pp. 21, 22, 23, 87, 88
Ahichhatra, the modern Rāmanagar, an-
cient capital of North Panchālā, p. 21
Akbar, copper coins of, p. 213
Anu-mitra, coins of, pp. 21, 26
Artesian wells at Pondicherry, p. 7
Astronomy of the Jains, pp. 107, 181
Ayu-mitra, coin of, pp. 27, 139.

BHADRA-GHOSA, coins of, pp. 21, 22,
24, 88, 89
Bhānu-mitra, coins of, pp. 21, 22, 25, 87,
89
Bhuila, site of the ancient city of Kapila-
vastu, p. 21 ; coins of the Mitras found
at, p. 21
Bhūmi-mitra, coins of, pp. 22, 26, 87
Branfill, Lt.-Col. B. R., Description of the
Great Śiva Temple of Gangai Kondap-
uram, p. 1.—Rude Megalithic Monu-
ments in North Arcot, p. 8
Buddhist Ruins, clay discs found in,
p. 127, clay seals found in, p. 135; cop-
per coins, p. 138

CARLLEYLE, A. C., Description of
coins of the Mitra dynasty, pp. 21, 87
Carnac, H. Rivett, coins of Mitra dynasty
belonging to, p. 21; memorandum on
coins of the Sunga dynasty, p. 87;

on clay discs, p. 127; note on Buddhist
copper coins, p. 138
Chenji or Sanji Kottai, a remarkable
precipitous bluff rock, pp. 5, 6
Chittānūr, handsome sculptures at, p. 6
Civilization of Afghān Tribes, p. 153
Classification of Hindi roots, p. 33
Clay Discs found in Buddhist ruins,
Memorandum on, p. 127
Clay seals, Buddhist, p. 135
Coins of Kashmir, p. 11; of Chumba, p. 11;
of the Mahārājās of Kāngra, pp. 10—
15; of Rājās of Kābul, p. 11; of
Sāmanta Deva, pp. 11, 12; of Susarma
Chandra, p. 11, of Prithvī or Pithama,
p. 11, of the Sunga or Mitra dynasty,
pp. 21, 87; found at Rāmanagar or
Ahichhatra, p. 21, at Bhuila, p. 21; of
Ghiās-ud-dīn and Mu'az-ud-dīn bin
Sām, p. 28; supplementary to Thomas'
Chronicles of Pathān kings, pp. 81, 207;
Buddhist copper, p. 138; copper of
Akbar, p. 213
Coorgs, tombs of, p. 9
Cunningham, General A, list of Rājās of
Kāngra, p. 12

DERIVATION of Hindi roots, p. 33
Description of the Great Śiva Temple of
Gangai Kondapuram, pp. 1—7; of
megalithic Monuments in North Arcot,
pp. 8—10
Dhruva-mitra, coins of, p. 28
Distribution of Afghān Tribes, p. 141

GANGAI Koṇḍapuram, Great Śiva Temple at, p. 1
Ghiās-ud-dīn, coins of, p. 28

HINDI Roots, collection of, pp. 33—81
History of Kashmir, Muhammadan period, p. 17
Hoernle, Dr. A. F. Rudolf, collection of Hindi roots, p. 33

INDO-SCYTHIAN princes of Kábul and Kángra, p. 10, coins in the Lahore Museum, p. 13
Indra-mitra, coins of, pp. 21, 23, 27, 89
Inscription, on Lanka Island, Wular Lake, Kashmir, pp. 16, 20
Iralabanda Bápanattam, tomb-field at, p. 8

JAIN Astronomy, pp. 107, 181
Jalandhar, Rájás of, p. 10
Jarrett, Major H. S., Note on an Inscription on Lanka Island in Kashmir, p. 16
Jayamba Mahárája, founder of the Temple at Mailam, p. 6

KAMALA-KANNI-Y-AMMAM, a goddess, carved stone dedicated to, p. 5
Kamuda Sena, coins of, p. 138
Kángra, fort and coins of, p. 10
Kashmir coins of, p. 11; inscription found on Lanka Island, p. 16; Muhammadan history of, p. 17
Kistvaen in North Arcot, p. 8.

LANGUAGE of Afghán Tribes, p. 163
Lanka Island in Wular Lake, Kashmir, Inscription found on, p. 16
Letters, Tamil, on old pottery, p. 9

MAHMUD, conquers Kángra, p. 10
Megalithic Monuments in North Arcot, pp. 8—10
Mitra dynasty, coins of, pp. 21, 87; list of kings of, pp. 23, 28
Mu'az-ud-dīn bin Sám, coins of, p. 28
Muhammad Azam, author of Persian History of Kashmir, p. 17

NAGARKOT, fortress conquered by Mahmūd, p. 10
North Arcot, megalithic Monuments in, pp. 8—10

PANCHALAK, ancient capital of, p. 21
Pathán kings, supplementary coins of, pp. 81, 207
Porumukkal, stronghold near Tindivanam, pp. 6, 7
Pháguni-mitra, coins of, pp. 21, 22, 26, 87, 88.
Pithama, see Prithví
Polity of Afghán tribes, p. 149
Pondicherry, artesian wells at, p. 7
Ponniyár, stone circles at, p. 7
Prithví, coins of, pp. 11, 14
Pushapura or Pátaliputra, capital of the Mitra dynasty, p. 21

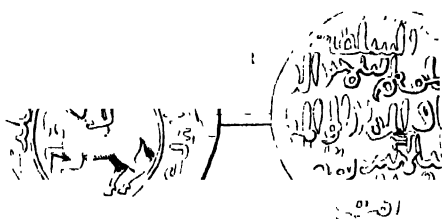
RAJJA Taranginí, History of Kashmir, p. 16
Rájás of Kángra, pp. 10—12; of Trigarthá, p. 10; of Jalandhar, p. 10, of Kábul, p. 11
Ramadatta, coin of, p. 87
Rámalinga-pillai-salai, a remarkable college building, p. 2
Rámanagar or Ahichhatra, ancient capital of North Panchála, p. 21
Rodgers, Chas. J., coins of the Mahárájas of Kángra, p. 10; Coins supplementary to Thomas' Chronicles of Pathán kings, pp. 81, 207; copper coins of Akbar, p. 213
Roots, Hindi, p. 33.

SAMANTA Deva, coins of, pp. 11, 12, 14
Sanji-Kottai, see Chenji
Satya-mitra, coin of, p. 138
Saya-mitra, coin of, p. 139
Spindle Whorls, Memorandum on, p. 127
Stülpnagel, C. R., Description of coins of Ghiās-ud-dīn and Mu'az-ud-dīn bin Sám, p. 28
Sungu dynasty, coins of, pp. 21, 87
Súrya-mitra, coins of, pp. 21, 24, 28, 87, 89
Súryaprapāpti, pp. 107, 181
Susarima Chandra, coins of, p. 11

- T**AMIL letters on a fragment of a bowl,
p. 9
Tanjore, great Temple at, p. 1
Temple, Lieut. R. C., Remarks on the
Afgháns found along the Route of the
Tal Chotiali Field Force, pp. 91, 141
Torra Cottas, volcano-shaped, p. 137
Thibaut, Dr. G., on the Súryaprajñapti,
pp. 107, 181
Tombs at Iralabanda in North Arcot,
p. 8; of the Coorgs, p. 9
Trichinopoli district, remarkable places
in, pp. 1—7
Thigartta, Rájás of, p. 10
- V**AISAKHA Deva, coins of, p. 138
- W**ELLS, artesian near Pondicherry,
p. 7
Wular Lake in Kashmír, pp. 16, 20
- Z**ayn Ibád, of Kashmír, p. 16
Zayn-ul-Aábidín, Sultán of Kashmír,
pp. 16, 19



R



10



R



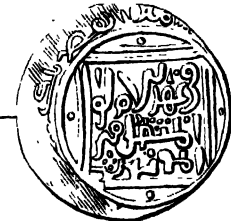
R



R



R





R

7



R

8



R

9



R

10



R

11



R

12

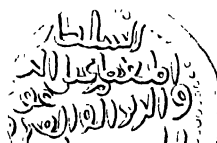




A



A



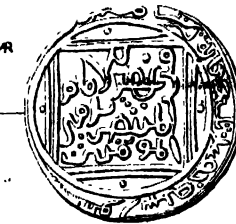
A



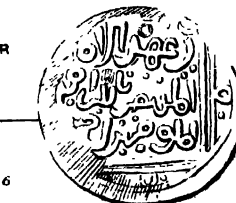
A



A



A

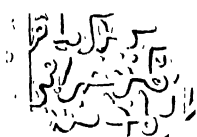




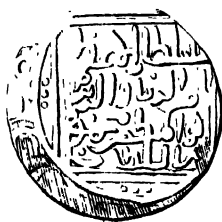
AR



AR



AR

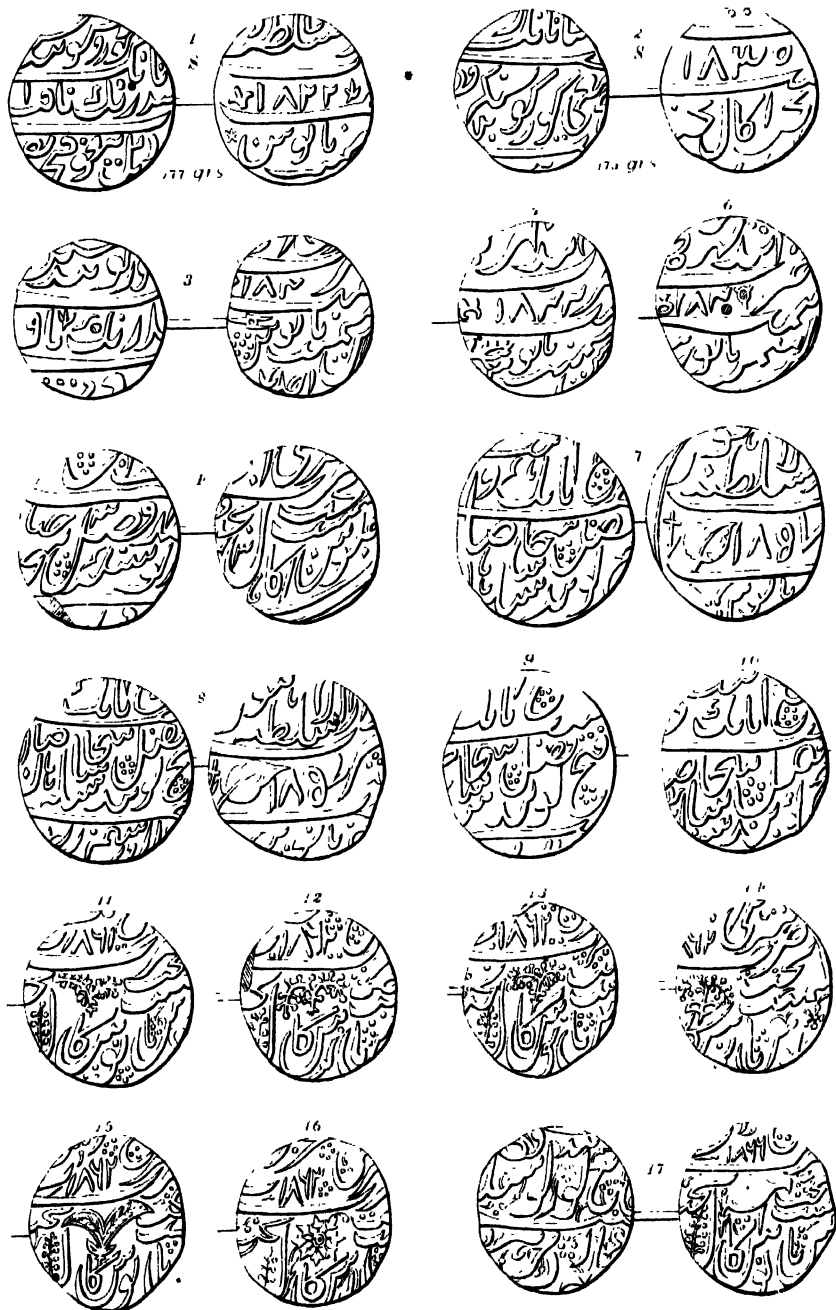


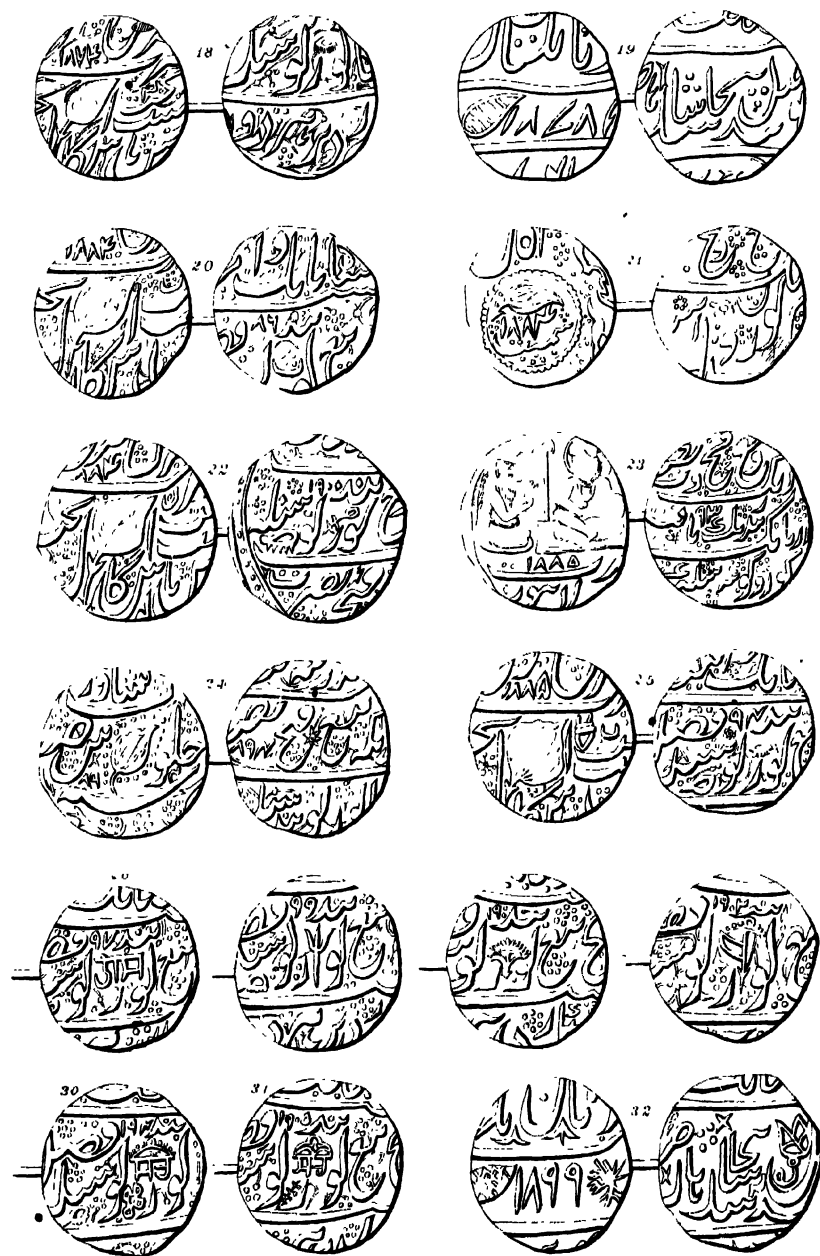
AR



AR

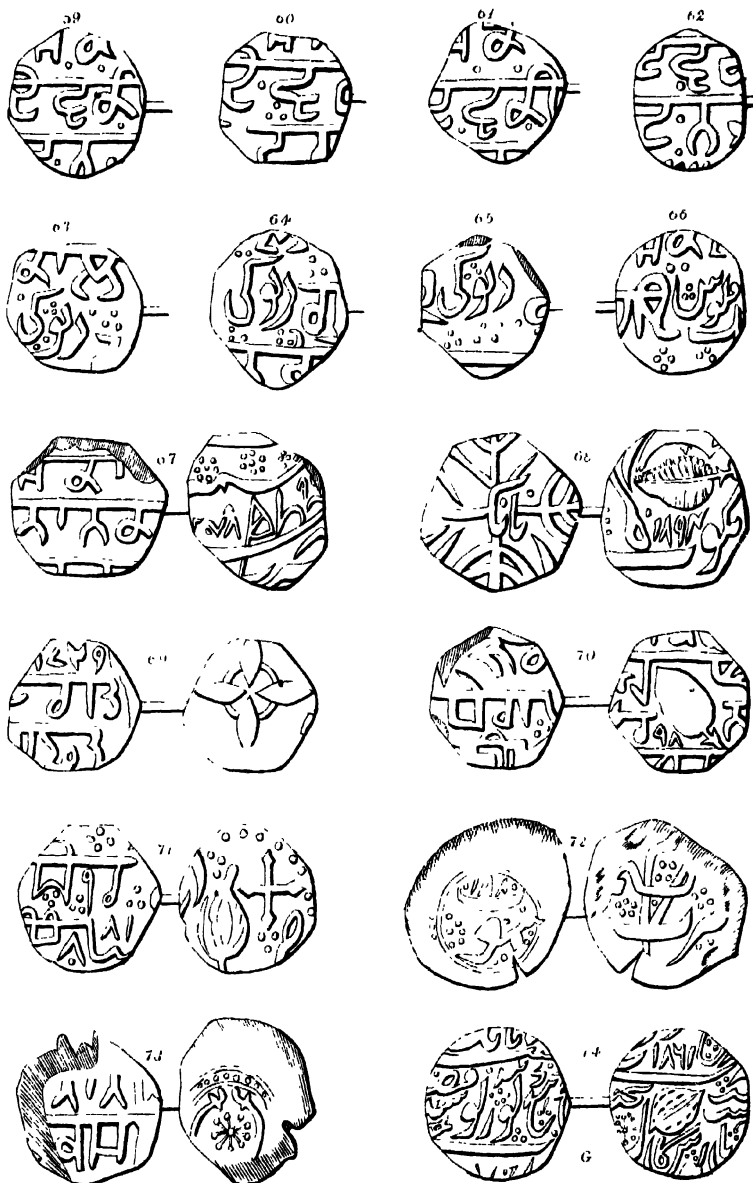












JOURNAL

OF THE

ASIATIC SOCIETY OF BENGAL.

Part I.—HISTORY, LITERATURE, &c.

No. I.—1881.

Contributions to the History of Bundelkhand.—By VINCENT A. SMITH,
B. A., B. C. S.

PART I.

THE PRAE-CHANDEL PERIOD. (To 830 A. D.)

The Gaharwárs.

The traditions current in Mahoba and the villages in the neighbourhood unanimously declare that a Gal arwár Ráj preceded at some undefined date the rule of the famous Chandel dynasty. I have carefully noted all traditions of this kind that I heard, but have not succeeded in learning much about the old Gaharwár chiefs. One fact we know for certain that they were great tank builders, and in the country round Mahoba their tanks are nearly as numerous as those ascribed to the Chandels, from which they may generally, if not always, be distinguished by the circumstance that in the Gaharwár embankments no cut stone is employed, whereas part of the Chandel embankments is generally formed of dressed granite blocks. The antiquity of the Gaharwár works is attested, not only by the rudeness of their construction, but also by the fact that in several cases the embankments are broken and the beds of the lakes or tanks dry.

The greatest of the Gaharwár works is the massive embankment of the Bijanagar lake, a beautiful sheet of water about four miles in circumference, situated about three miles east of Mahoba.

General Cunningham (Arch. Rep. II, 439) asserts that this lake was the work of Vijaya Pála Chandel in the eleventh century, but, although it

is by some attributed to Bij Brihm Chandel, the general belief is that it was constructed by the Gaharwárs, and, judging from the style of the masonry, I have no doubt that the latter opinion is correct.

The embankment was repaired by Díwán Mohan Singh, an illegitimate son of Rájá Chhatarsál, about the middle of the last century, and has since been further strengthened by the English authorities. The ruins of Mohan Singh's castle still form a conspicuous object in the view from the embankment.

The Kandaúra Tál, situated in the townships of Thána and Paswára, and separated by a narrow strip of land from the Bijanagar lake, is one of the prettiest of the Bundelkhand lakes. It was constructed, it is said by Kandaúr Singh, an officer of the Gaharwár Rájá.

The following list comprises all the Gaharwár embankments, so far as I have noted them, but it is certainly very incomplete.

Pargana Mahoba.

Name of village.

1. Baraipura. A small broken tank. The old *khera* or mound here is named Máhilpur, and is said to have belonged to Máhil Parihár, the counsellor of Rájá Parmál.
2. Bhandrá. A large tank, containing water.
3. Bhatéwar. A considerable dry tank. The village is said to have belonged to Jagnáik Bhát, a servant of Rájá Parmál, and a prominent personage in the Chand Ráesa.
4. Bijanagar. An extensive and deep lake, which never dries up.
5. Bilkhlí. A considerable lake, which never dries up.
6. Káripahári. A small dry tank.
7. Paswára. A beautiful lake, belonging partly to Paswára and partly to Thána. It is named the Kandaúra Tál, and is said to have been constructed by Kandaúr Singh, an officer of the Gaharwár Rájá.
8. Pawá. A considerable but shallow lake, much silted up; it is named Bapurá.

Pargana Panwári-Jaitpur.

1. Narerí. A tank, which dries up in the hot weather. It is said to be the work of Narhar Gaharwár.
2. Nunaura or Nunyaura. A large tank.
3. Sela Muáf. A tank named Kantalá.

The fact that not one of the tanks above enumerated is situated more than about 15 miles from Mahoba indicates that the Gaharwár principality was restricted to the immediate neighbourhood of that town.

Many of the Chandel tanks and lakes are associated with temples, but, so far as I remember, the Gaharwár tanks never are.

All legend connects the Gaharwár clan with Kási (Benares), but how or when the Gaharwárs obtained possession of Mahoba we know not.

● Possibly their movement may have been connected with the commotions which ensued on the death of Harsha Varddhana, the great king of Kanauj, in the middle of the seventh century.

A Gorakhpur tradition affirms that the Gaharwárs are descended from the famous Rájá Nala and came to Kási from Narwar near Gwáliár;* and, if there be any truth in this story, the Gaharwárs may have taken Mahoba on their way from Narwar to Benares.

There seems to be some reason to believe that the Gaharwár rulers of Bundelkhand were connected with the Gaharwár dynasty of Kanauj, but I am not at present in a position to discuss the point.

The Parihárs.

The traditions preserved by the Kánungo's family of Mahoba declare that the Gaharwár dynasty was succeeded by the rule of Parihárs, who were overthrown in 677 Samvat by Chandra Varinma the first of the Chandel chiefs.

The fact that Mahoba and a large part of Bundelkhand was once subject to Parihár rulers does not rest on the authority of Mahoba traditions alone. I shall now state all the evidence on the point which appears to be at present accessible.

The little principality of Nagod or Uchahara, situated on the high road between Allahabad and Jabalpur about 100 miles from Mahoba in a south-easterly direction, is still governed by a Parihár chief. General Cunningham in his last volume gives the following account of the traditions of this family :

"The original name of the district is said to have been Barmé, and the Barmé Nadí is noted as being the present boundary between the Mahiyar and Uchahara chiefships. But this stream was at first only the boundary line which divided the two districts of north and south Barmé. At Kári Tálai, which once formed part of Mahiyar, I found an inscription with the name of Uchaharā. The old name of Barmé is widely known; but few people seemed to know anything about the extent of the country. From the late minister of the Uchahara state, I learned that the Parihár chiefship was older than that of the Chandels of Mahoba, as well as that of the Baghels of Rewa. According to his belief, it formerly included Mahoba and all the country to the north as far as the Gháts and Bihari on the south, and extended to Mau Mahewa on the west, and on the east comprised

* Martin's Eastern India, II, 458 quoted in Beames' Elliot, I, 124 note.

most of the country now held by the Bághels. I do not suppose that the Bághels would admit this eastern extension; but it seems to receive some support from the position assigned by Ptolemy to the *Poruári*, who are very probably the same people as the Parihárs. The great lake at Billhari, called Lakshman Sagar, is said to have been made by Lakshman Sen Parihár; and the great fort of Singorgarh, still further to the south, contains a pillar bearing the name of a Parihár Rájá. The family has no ancient records, and vaguely claims to have come from Abú-Sikhar in the west (Mount Abú) more than thirty generations ago.

"In Uchahara itself there is no ancient building now standing; but there are numerous fragments of architecture and sculpture which probably date as high as 700 or 800 A. D. This is perhaps the earliest date that can be assigned to the Parihárs in Uchahara, as everybody affirms that they were preceded by a Teliya Ráj, or dynasty of Telis, who resided at *Kho*, over the whole of the country called Barmé."*

This Uchahara tradition is, it will be observed, quite in agreement with the Mahoba tradition, so far as the latter goes.

The town of Panwárá, situated a few miles from the Dasán River, and about 27 miles W. N. W. of Mahoba, is supposed to have been founded by Rájá Pand, a Parihár Thákur in 960 Samvat = 903 A. D. A fort called Pandi used to exist near where the bazár now stands. The Panwárá people also affirm that the Parihár rule preceded the Chandel, and that the Parihár dominions extended from the Jamna to the Narbada. This tradition is supported by the fact that the old name of Panwárá was Parhárpur.†

Part of the town of Mahoba is still remembered as the Parihárs' quarter, but Thákurs of any clan do not, with one or two exceptions, now reside in Mahoba, which is believed to have become an unlucky place for both Thákurs and Lodhís since the overthrow of the Chandels.

The earliest inhabitants of 'Arí in Jaitpur are said to have been Parihárs, who constructed a small tank called Nadiyá, which has an appearance of great antiquity.

An early Parihár occupation is also mentioned in the traditions of a few other villages.

The Mahoba Kánungos name 677 Samvat as the date of the substitution of the Chandel Chandra Varma for the Parihár ruler. Of course it is now well known that the real founder of the Chandel dynasty was not Chandra Varma but Nánika. The date, however, can hardly be quite imaginary. General Cunningham and Col. Ellis were on different occasions

* Arch. Report, IX, pp. 5 and 6. At p. 35, General Cunningham distinguishes Lakshman Sen from Lakshman Singh, and says that the latter was the builder of the Bilahri tank.

† Beames' Elliot, II. 97.

given the following dates for the accession of the Chandels to power—204, 225, 661, and 682. As it is well established that the Chandel dynasty attained power in or about 800 A. D. (probably a little later, say in 830 A. D.), it is clear that these dates do not refer to the Vikrama Samvat.* General Cunningham proposes, and I think rightly, to refer the smaller numbers, *i. e.*, the dates 204 and 225 to the era of Śrī Harsha of Kanauj, which began in 607 A. D., and thus to make them equivalent to 810 and 831 A. D. respectively, a conclusion which is in complete accordance with the Chandel inscriptions.

But, when he attempts to interpret the dates 661 and 682 by referring them to the Śāka era, thus making them equivalent to A. D. 739 and 760 respectively, he is not so happy, for those dates are much too early.

It is curious that the difference between 204 and 225, the extreme dates of one set, and 661 and 682, the extreme dates of the other set, is the same, *viz.*, 21 years.

This circumstance may be accidental, but perhaps it may not be too fanciful to conjecture that the traditions have preserved in two forms the dates of two events which were separated by an interval of 21 years, but have confounded the events.

It is hard to determine the era to which the higher numbers, if they are not purely imaginary, should be referred.

The recently discovered Kulachuri era of the kingdom of Chedi,† which kingdom at one time included Mahoba, naturally occurs to the mind, but that era would give A. D. 910, 926, and 931 respectively as the equivalents of 661, 677 and 682; and the first and last of the dates so obtained are exactly a century later than the dates resulting from the application of the Śrī Harsha era to the other set of traditional dates.

Still, in spite of this difficulty, I am disposed to believe that the Chedi era supplies the right key, and I conjecture that there is a mistake of a century in the tradition, and that the larger numbers should be read as 561, 577 and 582.

Such an interpretation of a tradition may appear to the reader unreasonably fanciful, but I justify it by showing that similar mistakes do occur in traditions. I have heard the date of the capture of Mahoba by Rājā Prithirāj stated as S. 1140, the correct date being S. 1240, or more accurately S. 1239; and my notes give the traditional date for the foundation of Murhārī near Jaitpur as “S. 641 or S. 741.”

What is probably an instance of a similar error will be noticed in the discussion on the reign of Madana Varmma*Chandel in the second part of this essay.

* The known Chandel inscriptions are all beyond doubt dated in the Vikrama Samvat.

† See Arch. Rep. IX. 111 and 112.

I conclude therefore that the date A. D. 831, which best accords with the evidence of the inscriptions, is the correct date for the overthrow of the Parihár chief of Mahoba by Nánika Chandel.

Perhaps some important stage in the contest between the rival chieftains marked the year 810, twenty-one years before the final victory. ●

The existence to this day of the little Parihár State of Uchahara shows that the Chandel success involved no extermination of the vanquished. The Uchahara chief probably throughout retained his local jurisdiction, in subordination at one time to the Chandels, and at another to the Haihayas or Kulachuris of Chedi, just as he now retains it in subordination to the British Crown.

In the same way we need find no difficulty in believing that Panwári was occupied by a Parihár Rájá in 908 A. D., in which year the Rájá of Mahoba was one of the early Chandels, most probably Ráhila Varmma.

The Lakshman Sagar at Bilahri midway between Jabalpur and Uchahara is attributed to Lakshman Singh (? Sen) Parihár, who is said to have reigned 900 years ago. If this be true, he was probably a vassal of the king of Chedi, for Bilahri does not appear to have been generally within the limits of the Chandel dominions, although, as will be shown, it was probably held by Madana Varmma in A. D. 1164.

I therefore accept the tradition as probably true which affirms that the Parihár kingdom extended over most of Bundelkhand, and I believe that its extent was larger about 800 A. D. than at any other time. The Chandels, in or about 831 A. D., ousted the Parihárs from the government of Mahoba and also probably from that of Kálinjar and Khajuráho, the Parihárs retaining their grasp on Uchahara and the surrounding country.

I was informed by the Bundela zemindárs of Kheoraha-Jeoraha in Pargana Mahoba that the capital of the Parihár kingdom was Mau-Sahan-ia between Nayagaon (Nowgong) and Chhatarpur.

According to the local tradition,* Mauza Murhári, close to Jaitpur, was founded in 1137 Samvat = 1080 A. D. by Rájá Udaikaran Parihár, who is said to have belonged to the same clan as Máhil, the adviser of Rájá Parmál Chandel. The tradition adds, that this Rájá was defeated in battle by the king of Dehli. The remains of his fort are still to be seen. Whether he was connected or not with the old Parihár dynasty I cannot say.

The Parihárs, who, at later dates, entered Bundelkhand, seem to have had no connection with the early rulers of the country, but their traditions are perhaps worth noting.

The Parihárs, who settled in 25 villages along the Dasán river,

* That is to say, as I heard it myself. The other traditional dates 641 and 741 given above were obtained by a native agent.

arrived in the year 1303 Samvat = 1246 A. D. from Gwáliar. There can be little doubt that this migration was consequent on the capture of Gwá-liar and the destruction of the Parihár Ráj there by Altamish (Iltitnish) in 1232 A. D.

The Parihárs of the Dasán assert that Rájá Rám the leader of the immigrants in 1246 A. D. founded seven forts at the following places :—

(1) Rámgarh, in Pargana Ráth, among the ravines of the Dasán, now deserted ; (2) Panwári ; (3) Ráth, on the site known as the Old Fort, where the Tahsil now stands ; (4) Kálpí ; (5) Magraut in the N. W. corner of Pargana Ráth ; (6) Chandaüt or Chanoüt, in Pargana Jalálpur, where the Ráth and Kálpí road crosses the Betwa ; and (7) at Banda, the Old Fort.

This tradition seems to confuse the memory of the Præ-Chandel kingdom of the Parihárs with that of the movements of the Parihár clan resulting from the Musalmán successes.

Mauza Baura near Jaitpur was occupied by Parihárs from Salárpur in 1404 Samvat or 1347 A. D., which year fell in the reign of Muhammad Tughlak.

PART II.

THE CHANDEL PERIOD.

831-1182 A. D.

The general outline of the Chandel genealogy and chronology was satisfactorily settled by General Cunningham in his Report for 1864-1865, but some details still admit of discussion, and later discoveries require the modification of some of the conclusions then arrived at by General Cunningham.

In the following pages I shall endeavour to exhibit concisely all that is now known respecting the reign of each of the Chandel princes, and shall at the same time discuss the doubtful points in the chronology and genealogy of the dynasty, entering into a more complete collation of the published and translated inscriptions than has yet been attempted.

(I.) *Nánika.* (Probable date 831-850 A. D.)

This prince is mentioned as the founder of the dynasty in the long Láláji (or Visvanáth) and Chaturbhuj inscriptions of Dhanga at Khajuráho, and in the imperfect Mahoba inscription dated S. 1240.*

* Proc., A. S. B., for 1879, page 143.

We know nothing of the events of his reign, but it may be assumed that he was the leader who wrested Mahoba from the Paribárs.

(II.) *Vákpati.* (Probable date 850-870.)

Mentioned only in the Láláji and Chaturbhuj inscriptions.

Nothing positive is known of his reign, but it should be noted that Bhoja king of Kanauj held the fort of Chanderí in 862 A. D.,* and that that position was consequently not in possession of Vákpati.

(III.) *Vijaya.* (Probable date 870-890.)

Mentioned only in the same inscriptions as Vákpati, and nothing definite is known about him; he is called a "great conqueror" in the Láláji inscription.

(IV.) *Ráhila.* (Probable date 890-910.)

Ráhila, like Vijaya and Vákpati, is mentioned in the Láláji and Chaturbhuj inscriptions only, among the longer extant documents, but his name is found graven on several of the stones of one of the temples at Ajaigarh, and he is the reputed builder of some of the tauks and temples at that fortress.†

We may therefore infer that in his time the Chandel dominions included Ajaigarh, and there can be little doubt that from the first they included the neighbouring stronghold of Kálinjar, which is associated by tradition with the beginnings of Chandel greatness.

Up to the time of Parmál's defeat in 1182 A. D. the Chandel kingdom seems to have always included Mahoba, Kálinjar and Khajuráho. It cannot be far from the truth to assert that Kálinjar, with its celebrated fortress, was the military capital; Khajuráho, with its multitude of temples, the religious, and Mahoba, with the Rájá's residence, the civil capital of the Chandel State.

In the inscriptions, so far as I am aware, the Rájás always take the title of "lord of Kálinjar."

Chand describes Ráhila as a great conqueror, whose victorious arms penetrated to Ceylon, but this is of course an absurd exaggeration.

The poet also ascribes to him the foundation of Rasan in Pargana Badausa, distant about 20 miles N. E. from Kálinjar, and on this point the poet may be right, for Rasan is undoubtedly ancient. As the place has not been described at length, I may take this opportunity of inserting some notes about the antiquities there, kindly communicated to me by Mr. A. Cadell, who writes: "It had evidently been at one time a place of im-

* Arch. Report, IX. p. 102.

† *Ibid.* VII, 41.

portance. The hill was fortified, and on the top there is a Chandel temple, of the usual shape, very plain, with no figures carved on the stone as at Gulrámpur.* The temple and colonnade are very little injured, but the only inscriptions are on stones at the entrance, and are no doubt of later date. To the east of the temple is a *baiṭhak* built of unusually large stones, roughly but well fitted; the surface of many of the stones is about three feet square.

"Oldest Rasan was on the slope of the hill; there are still remains of houses, and towards the plain there is a gateway made of stone taken from old buildings."

These notes, I think, indicate that the buildings at Rasan are older than the highly decorated edifices at Khajuráho of the 10th and 11th centuries, and so far confirm the statement that the city was founded by Ráhila.

The Ráhilya Ságar and the fine, but much injured, cruciform granite temple on its embankment near Mahoba are undoubtedly the work of Ráhila, and their existence proves that he held Mahoba as well as Ajaigarh and Kálinjar.

Kokalla I the Kulachuri king of Chedi (*i. e.*, the country round Jabalpur) married a Chandel princess named Nandá Deví,† who was probably the daughter either of Ráhila or of his predecessor Vijaya.

I may take this opportunity of noting that the dynasty generally known as Chandel (Chandella) is in some inscriptions, *e. g.*, the Láláji inscription at Khajuráho, called Chandrátreya, a name which might also be applied to the Kulachuri kings, for they too pretended to trace their descent back to the moon through the mythical Atri.‡

(V.) *Harsha.* (Probable date 910-930.)

This prince is mentioned in the Láláji, Chaturbhuj and Nunaura No. II inscriptions.

The Láláji inscription informs us that he was a great conqueror, and that he married Kankutá of the race of Gangá, but we know nothing more.

(VI.) *Yaso Varmma.* (Probable date 930-950.)

This prince was the son of Harsha, and is mentioned in the same inscriptions.

His consort was Narmá Deví.

* Gulrámpur also is in Pargana Badausa. The antiquities there have not been described.

† Arch. Raport, IX, 83.

‡ *Ibid.* p. 101.

General Cunningham informs me that he possesses "inscriptions of Yaśo Varmma's grandchildren," but nothing has been published concerning these documents.

(VII.) *Dhanga.* (*Date circa 950-999.*)

The earliest dated inscriptions of the Chandel dynasty, as yet discovered, belong to the reign of Dhanga.*

Three undoubted dated inscriptions of this prince are known, *viz.*—

(1.) The Chaturbhuj inscription at Khajuráho, dated S. 1011 = 954 A. D.

(2.) The Nunaura No. II inscription, dated S. 1055 = 998 A. D.

(3.) The Láláji inscription at Khajuráho, dated S. 1056 = 999 A. D. which records Dhanga's death in that year.

The short inscription, dated S. 1011, on the doorpost of the Jinanáth temple at Khajuráho appears to contain Dhanga's name, but the reading is * doubtful.

An inscription, now apparently lost, which General Cunningham found at Mahoba, gave the Chandel genealogy from Dhanga to Kirtti Varmma, that is, I presume, to Kirtti Varmma I.

The Mau-Chhatarpur inscription without date may have contained Dhanga's name at the beginning where the stone is imperfect, and his name is expressly mentioned in verse 21, which tells us that his minister was named Prabhása.

In 999 A. D., according to the Láláji inscription, his minister was Yasondhara.

The Rájá of Kálinjar, who, in common with the Rájás of Dehli, Ajmír and Kanauj, assisted Rájá Jaipál of Lahore in his unsuccessful invasion of Ghazní, and at the battle of Lamghán in the Pesháwar valley in 978 A. D., must necessarily have been Dhanga.

The beginning of the Mau-Chhatarpur inscription states that the king eulogized, "having overcome the king of Kányakubja (Kanauj), chief "amongst all in battle, obtained sovereignty"; but here the name is lost, and it is uncertain whether the reference is to Dhanga, or to his successor Gaṇḍa, who certainly did conquer Kanauj.

The Láláji inscription asserts that Dhanga kept prisoners the consorts of the Rájás of Kási (Benares), Andhra (Telingána ?) Anga (West Bengal) and Rádha (?), and that he had in attendance the kings of Kosala (North Audh ?), Kuntala (Ballarí ?), Kráttha (Berar ?), and Sinhala (Ceylon).

These boasts are plainly exaggerations, but it is evident that Dhanga was the most powerful of the early Chandel kings.

* For list of Chandel inscriptions with full references *vide post*.

In all probability the existing Lálájí temple at Khajuráho was the shrine of the great "emerald lingam" referred to in the inscription.

The erection of this costly and elaborate temple is another proof of Dhanga's wealth and power.

Dhanga cannot have been a sectarian bigot, for his Chaturbhuj inscription is Vaishnava, and his Lálájí inscription is Saiva.

This prince died at the sacred confluence of the Ganges and Jumna at Prayág (Allahabád) aged "upwards of one hundred autumns" in the year 999 A. D.

Dr. Rájendralál Mitra has pointed out that the common interpretation of the passage in the Lálájí inscription describing Dhanga's death, which assumes that he committed suicide, is incorrect, and that "the ordinary civil way of announcing a death is to say, so-and-so has surrendered his life to the holy river so-and-so, or the sacred pool (*kshetra*) so-and-so, and the inscription has probably adopted the same mode of expression."*

It is to be observed that the grant recorded in the Nunaura No. II inscription was made at Kási by Dhanga in the autumn of 999 A. D., but it is of course possible that he may merely have gone there on a pilgrimage, and that Benares was never included in his dominions.

The inscriptions show that Dhanga must have succeeded his father Yaso Varma in or about the year 950 A. D.

(VIII.) *Gandā.* (Date 999 A. D. to circa 1025.)

This prince is not mentioned in any extant inscription except the Mau-Chhatarpur one, but must have been named in the missing Mahoba inscription before referred to.

If he was Dhanga's son he must have been well advanced in years on his succession in 999.

Gandā must have been the Rájá of Kálinjar who assisted Rájá Jaipál of Lahore against Mahmúd of Ghaznı in 1008 A. D. and he must likewise be identified with the Nanda Rai, Rájá of Kálinjar, who according to Farishta, conquered Kanauj and killed its ruler in 1021 A. D. and who was, in punishment for his audacity, attacked by Mahmúd, to whom he surrendered Kálinjar with 14 other forts in 1023 A. D.

It is unfortunate that the names of these forts have not been preserved, for the extent of the Chandel dominions at any given time is very imperfectly known.

The dates given above limit closely the possible duration of Gandā's reign, for we know that it began in 999 A. D. and that two reigns intervened between its close and the accession of Deva Varma Deva (*alias* Kirtı Varma I) who was reigning in 1050 A. D.

* J. A. S. Bengal Vol. XLVII, Part I, page 74.

The fact that an inscription dated S. 1058 = 1011 A. D. containing the name of Rájá Kokalla, is in the Lálájí temple at Khajuráho, has suggested the conjecture that Kokalla II of Chedi may have attacked the Chandel dominions early in Gaṇḍa's reign,* but this inscription has not been published nor translated, and there is no other evidence of such an attack.

It is, however, certain that at one time, which must have been prior to the reign of Kírtti Varṃma (1049-1100) the conqueror of Chedi, the kings of Chedi did exercise authority over Kálinjar, for in their inscriptions some of them assume the title of "lord of Kálanjjarapura."†

The Mau-Chhatarpur inscription informs us that Dhanga's minister Prabhása continued to serve under Gaṇḍa.

(IX.) *Vidhyádharma Deva.* (Probable date 1025-1035)

This prince is mentioned only in the Mau-Chhatarpur and Nunaura No. I, inscriptions, and, except that there is no doubt as to his place in the genealogy, and that we are told that his minister was named Sivanáma, we know nothing positive of his reign.

He was contemporary with Gángaya Deva king of Dáhal or Chedi, who in 1030-31 A. D., as we learn from Abú Riháú, had his capital at Tripuri near Jabalpur.‡

It is to be observed that the geographer includes both Gwáliar and Kálinjar in the country of Jajhoti, which was distinct from the country of Páhal. At that time Gwáliar was under the immediate rule of local Kachhwáha chieftains, but it is possible that they may have acknowledged the suzerainty of the greater Chandel kings.

(X.) *Vijaya Pála Deva.* (Probable date 1035-1049.)

This Rájá is mentioned in the same inscriptions as his predecessor is. His minister was Mahípála, and we learn from the Nunaura No. I inscription, that he had a queen named Bhuvana Deví, who was the mother of his successor, who is in that inscription named Deva Varṃma Deva; but with these two facts our information ceases.

(XI.) *Kírtti Varṃma Deva I, alias Deva Varṃma Deva, alias Bhúmipála.*
(Probable date 1049-1100.)

With this prince the difficulty in reconciling the inscriptions begins.

The Mau-Chhatarpur inscription declares (verse 7) that the successor of Vijapapála was Kírtti Varṃma Deva "famed unto the sea-shore," and informs us that his minister was Ananta, who is praised at length.

* Arch. Report IX. 86.

† *Ibid.* 77.

‡ *Ibid.* 106.

The Nunaura No. I inscription states that Vijaya Pála was succeeded by his son "the devout follower of Mahesvara, the lord of Kálinjar, Sri Deva Varmma Deva," to whom the usual praise is given.

Maisey's No. II, Nílkanth inscription from Kálinjar has the following words in verse 7, (the preceding lines being illegible). "Was born Bijaya-pála, from him sprang Bhúmipála, who with his sharp sword destroyed many kings."

It is therefore evident that Kírtti Varmma I, Deva Varmma Deva, and Bhúmipála, who are all recorded as having succeeded Vijaya Pála, were one and the same person.

It is difficult to fix the length of the reign of this many-named prince; for, as will presently be demonstrated, there was a second Kírtti Varmma, who may possibly be the Kírat Brahm of traditional fame.

One date in the reign under discussion is certain, namely, that of the Nunaura No. I inscription, S. 1107 = 1050-1 A. D., and this date must be very near the beginning of the reign, for Gaṇḍa Deva was alive in 1023 A. D., and two reigns intervene between Gaṇḍa and Deva Varmma *alias* Kírtti Varmma. We may therefore assume that the reign of the latter began in 1149 A. D., a date which must be very nearly quite correct.

I believe his reign to have been, like that of Dhanga, exceptionally long; for, after careful consideration of all the available evidence, I have come to the conclusion that Kírtti Varmma I, and not Kírtti Varmma II, is the prince mentioned in the prologue to the Prabodha Chandrodaya as the conqueror of Chedi, and further that he is the Kírat Brahm of tradition, and that the unpublished inscription cut on the rock at Deogarh in 1097 A. D. is his work.*

The defeat of Karna king of Chedi by Kírtti Varmma Chandel is attested by two independent documents, the prologue to the Prabodha Chandrodaya, and Maisey's No. II Kálinjar inscription.

Karna of Chedi was reigning (as the Benares copper-plate inscription shows) in 793 of the Chedi Samvat, equivalent to 1042 A. D.† and his reign seems to have extended till about 1075 A. D., or perhaps a few years later.

The prologue to the Prabodha Chandrodaya distinctly ascribes the subjection of Karna to Kírtti Varmma, but Maisey's No. II inscription ascribes the defeat of "the immense army of Karna" not, as might be expected to Bhúmipála, the *alias* of Kírtti Varmma, but to Bhúmipála's son, whose name is missing from the inscription.

The words are contained in verse 8, which follows verse 7 already quoted, apparently without any break. His (*scil.* Bhúmipála's) "son

* Arch. Report, IX, 108.

† *Ibid.* p. 82.

"made low the kings, as Agastya made low the mountain (i. e., the Vindhya mountains). Having conquered the southern country, speedily defeated the immense army of Karna [a break] *verse* 9. * * which was watered by the flood of tears of the gazelle-eyed females of Málwa [a break] * * *verse* 10. His son Jaya Varmma Deva etc." Q

From the Mau-Chhatarpur inscription we infer, with I think certainty, that the name of the son of Bhúmipála, *alias* Kírtti Varmma I, and the father of Kírtti Varmma II, *alias* Jayapála, was Sallakshana. I conclude therefore that the actual conqueror of Chedi was Sallakshana, while heir-apparent and acting under the orders of his father Kírtti Varmma I.

The Kálinjar inscription just quoted shows clearly that Kírtti Varmma II, *alias* Jaya Varmma, cannot have been the conqueror of Chedi, for that prince was the grandson of Bhúmipála.

The fort of Deogarh, now in the Lalitpur district, lies so far to the south-west towards Málwa, that it probably was in general held by the kings of Chedi. I infer in consequence that the inscription of Kírtti at Deogarh, dated 1097 A. D., is the work of Kírtti Varmma I, the conqueror of Chedi, to whom also should be ascribed the formation of the lake known as the Kírat Sagar near the fort of Chanderi, which is only a few miles distant from Deogarh.

The embankment of the lake bearing the same name at Mahoba is also probably the work of the same king.

"The people are unanimous" in referring the foundation of the town of Old Chanderi, 9 miles from the fort and more modern town, to the Chandels of Mahoba. General Cunningham was (though for no convincing reason) inclined to throw doubt on this tradition,* but I see no reason why it should be discredited, confirmed as it is by the names of the town and of the Kírat Sagar, and by the existence of the inscription at Deogarh.

For the reasons given above I am convinced that Kírtti Varmma I, under whose orders the conquest of Chedi was effected, is the Kírat Brahm of Bundelkhand tradition.

He is credited with having repaired the fortifications of Kálinjar, and with having constructed some of the buildings at Ajaigarh.†

To this king also should be assigned the coins bearing the name of Kírtti Varmma, because coins are known of his grandson Kírtti Varmma II, *alias* Jaya Varmma, stamped with the name of Jaya Varmma.

No coin of any kind is known to exist which can be assigned to any of the predecessors of Kírtti Varmma I, who appears to have been the first of the Chandels who coined money.

The coins of him and his successors are extremely rare, and are imita-

* Arch. Report, II, 402 and 405.

† *Ibid.* VII, 47.

tions of the coinage of the Kulachuri kings of Chedi, which appears to have been first issued by Rájá Gángaya Deva, who was reigning in 1030-1 A. D.*

It seems evident that Kírtti Varmma after his conquest of Chedi adopted the system of coinage there practised.

With reference to the date of the Deogarh inscription and of Karna Kulachuri's reign I would provisionally date the conquest of Chedi and the first issue of Chandel coins in 1070 to 1080 A. D., some twenty years or more before the close of the reign of Kírtti Varmma I.

It is possible that the fort of Deogarh may have been built or rebuilt by this king, and called after him under his name of Deva Varmma Deva.

(XII.) *Sallakshana Varmma Deva.* (Probable date 1100-1110.)

Unluckily, both in the Mau-Chhatarpur inscription and in Maisey's No. II, there is a lacuna in the genealogy where the name of the successor of Kírtti Varmma I, *alias* Bhúmipála, should come in; but, as General Cunningham has satisfactorily shown by an examination of the later verses of the Mau-Chhatarpur inscription, the missing name must have been Sallakshana.

I may add as further proof the argument that coins of Sallakshana (Hallakshana) are extant, and that verse 37 of the Mau-Chhatarpur inscription speaks of Sallakshana as "the sovereign ruler," and, that the rest of the Chandel genealogy being known with certainty, there is no other gap but this to be filled up by the name of a Rájá Sallakshana exercising the regal privilege of coining money.

The Mau-Chhatarpur inscription, which is here much injured, appears to state that Vatsu, Vámana and Pradyumna, sons of Kírtti Varmma's minister Ananta, all served under Sallakshana.

The reign of Sallakshana was certainly short, for his predecessor was reigning in 1097 A. D. and his successor in 1116 A. D.

(XIII.) *Jaya Varmma Deva* *alias* *Kírtti Varmma II.*

(Probable date 1110-1120.)

This prince is mentioned under the name of Jaya Varmma in the Lálájí inscription, the supplement to which was inscribed in his reign, in the year 1173 = 1116 A. D.

* Arch. Report, IX, 106 and II, 458. In 1871 only 36 specimens of the Chandel coinage were known to have been ever discovered, and of these 13 had been lost in the mutiny. I have not heard of any being found of late years. Of the 23 remaining, I possess two, for which I am indebted to the generosity of General Cunningham. In the course of six years residence in Bundelkhand I have not succeeded in discovering a single specimen.

A few coins too are known bearing the name of Jaya Varmma Deva.

In the Mau-Chhatarpur inscription he is described under the same name as the son of [Sallakshana] Varmma, and is praised in the usual fashion.

This inscription further informs us that his younger uterine brother was named Sallakshana Varmma. The words are “(verse 11) Jaya Varmma Deva etc., (verse 12). The fortunate Sallakshana Varmma was the uterine and younger brother of this lord of the earth; afterwards the prince Prithví Varmma, equal to the task, sustained the burden of the hereditary government.”

Verse 13 praises Prithví Varmma for his piety, and verse 14 tells us that “from him was born Madana Varmma, the protector of the earth,” whose praises are then detailed.

The inscription seems to have been erected in the reign of Madana Varmma.

The above words indicate that Sallakshana Varmma the younger was not a ruling prince; and indeed he cannot have been, for there is no room for two Sallakshanas in the roll of sovereigns. The younger Sallakshana is mentioned very much in the same way as Pratápa Varinma, the younger brother of Madana Varmma Deva, is mentioned in Maisey’s No. II inscription.

That document in verse 10 describes Jaya Varmma as “devoted to the worship of Náráyana,” and in verse 11 it is recorded that “being wearied of government, the king made it over to * * * Varmma and proceeded to wash away his sins in the divine river * * (verse 12). They departed their lives, and obtained all their desires in the next world (verse 13). “After him Madana Varmma etc.”

In the Augási copper-plate, dated S. 1190 = 1133 A. D., the order of succession is given as Kírtti Varmma, Prithví Varinma, Madana Varmma. As both this document and the Mau-Chhatarpur inscription agree in interposing only the name of Prithví Varmma between Madana Varmma and in the one case Jaya Varmma, and in the other case Kírtti Varmma, it necessarily follows that the name missing in Maisey’s No. II, is that of Prithví Varmma, and that Jaya Varmma and Kírtti Varmma II were one and the same person, the grandson of Kírtti Varmma I.*

This argument shows that Dr. Rájendralála Mitra cannot be right in identifying the Kírtti Varmma of the Augási plate with Sallakshana.

Jaya Varmma’s and Prithví Varmma’s reigns must both have been short, because Kírtti Varmma I was reigning in 1097, and Madana Varmma in 1131 A. D.

* “The numerous instances in which the grandson takes his grandfather’s name, and which is an interminable source of confusion in Indian chronological enquiries.” Fergusson’s *Indian Architecture*, p. 715.

(XIV.) *Prithvi Varmma Deva.* (Probable date 1120-1130.)

The inscriptions which mention this Rájá have already been discussed. A few coins of his are extant, but we know nothing definite about him, except that he was the father of Madana Varmma Deva, and that he is praised for his piety in the Mau-Chhatarpur inscription. The passage in that document relating to his ministers scarcely yields sense.

(XV.) *Madana Varmma Deva.* (Probable date 1130-1165.)

The dated inscriptions of this prince are unusually numerous, and when considered along with those of his successor, fix the limits of his reign very closely.

They are as follows:—

1. Maiscy's No. IV, from Kálinjar, S. 1188 = A. D. 1131.
2. Augási copper plate S. 1190 = A. D. 1133.
3. Nemináth statue at Mahoba S. 1211 = „ 1154.
4. Sambhunáth „ „ Khajuráho S. 1215 = „ 1158.
5. Sumatináth „ „ Mahoba S. „ = „ „
6. Ajitanáth „ „ „ S. 1220 = „ 1163.

The earliest inscription of his successor Paramárdi Deva is dated 1167 A. D.

Madana Varmma's name is preserved in the designation of the Madan Sagar lake at Mahoba, and in that of a small mound of ruins at Máhampur or Máhinpur about three miles east of the town, and known as Madan Khara.

The bardic lists all insert Kírtti Varmma between Madana Varmma and Paramárdi Deva, but these lists are worthless as evidence of the order of succession, and we have already seen that there were really two Kírtti Varmmas, at an earlier date.

In the Dahi copper-plate, which will be discussed in Part III, of this essay, the name of Paramárdi's predecessor was read from an imperfect copy as Yádava, an obvious mistake for Madana.

A few gold and copper coins of Madana Varmma Deva are extant.

The numerous Jain images bearing dates, which fall within the limits of Madana Varmma's reign, and four of which are expressly stated to have been set up in his time, prove that under his rule the Jain religion flourished.

In the Augási copper-plate Madana Varmma calls himself the devout worshipper of Śiva, but whatever his own belief may have been, it is evident that he freely tolerated a rival creed.

The poet Chand and the inscriptions concur in testifying that Madana Varmma was a great and successful warrior who widely extended the rule of his house.

If the words of verse 14 of the Kálinjar No II inscription are to be literally taken, Madana Varmma^a pushed his victories as far west as Guzerat,¹ and Chand confirms the statement, but it is perhaps safer to believe that the conquest of Chedi which Madana Varmma really effected may have been exaggerated. The words of the Kálinjar inscription are "He in an instant defeated the king of Gurjjara, as Krishna in former times defeated Kaṇṣa. He undertook an expedition to conquer the world. * * *"

The undated Mau-Chhatarpur inscription records the conquest of Chedi by Madana Varmma.

It will be remembered that Kírtti Varmma I had conquered Chedi in the reign of Karna Kulachuri, prior apparently to the year 1097 A. D. The Kulachuri power must have recovered in the early part of the twelfth century to render necessary the second conquest by Madana Varmma.

The latest known inscription of the Kulachuris of Chedi is one of Vijaya Deva dated in 932 of the Chedi era = 1181 A. D. General Cunningham (Arch. Rep. IX, 113) conjectures that the Chedi dynasty was overthrown by the growing power of the Baghels of Rewá, but produces no evidence in support of his conjecture.

It seems to be more reasonable to suppose that the decline of the Kulachuri dynasty of Chedi was due rather to the effects of the victories of the neighbouring Chandel king than to the rise of the Baghel power to the east of the Chandel territory. The existence of a Kulachuri inscription, dated 1181 A. D., shows that the dynasty, though weakened, survived the Chandel attack.

With reference to the conquest of Chedi by Madana Varmma a passage in Colonel Sleeman's writings is interesting. He writes about Singolgarh, "This fortress is of immense extent, and was built by Rájá Belo, a prince of the Chundele Rájput tribe, who reigned over that country before it was added to the Gurha Mundala dominions," and in a note he adds: "The Mahoba family were Chundele Rájputs, and their dominion had extended over Singolegurh, as above stated, and also over Belehrí, or the district of Kanoja in which it is comprised. The capital of Belehrí was Kondulpore, three miles west from the town of Belehrí. There is a stone inscribed by Rájá Mulun Deo on the dedication of a temple at Kondulpore dated Samvat 815, A. D. 758. He was one of the Chundele Rájás."

General Cunningham in his account of Bilharí and the surrounding country makes no mention even of the existence of such a place as Kondalpur, nor does he seem to have looked for the inscription said by Col. Sleeman to exist there.

He throws doubt on the facts recorded on the authority of tradition

by Col. Sleeman in the following remarks: "According to Sir William Sleeman, the fort of Singorgarh was built by Rájá Belo, one of the Chandel Rájás of Mahoba. But none of my informants had ever heard of Rájá Belo Chandel; and I have very grave doubts as to the Chandel rule having ever extended so far to the south."

"The whole of this part of the country would appear to have belonged to the Parihárs or Pratihárs, as we find was actually the case in A. D. 1307, when these monoliths were erected. But the Pratihárs were tributary to the great kings of Chedi, whose rule certainly extended as far north as Bharhut and Kálinjar. The latter place was recovered by the Chandels in the 11th century; but the Kulachuris still held the country about Bharhut in the 12th century."

Sir William Sleeman, however, was an accurate and careful inquirer, and traditions recorded by him demand careful consideration, and although General Cunningham's informants knew nothing of Rájá Belo, there is some evidence of his existence, and also of the fact that Bilhari was at one time part of the Chandel dominions.

It is true that the genealogies of the regnant Chandel princes given in the inscriptions do not include the name of Rájá Belo or Belá, but it is also true that the name is included in all the bardic lists, and that it is traditionally remembered.

The lake at Jaitpur, called the Belá Tál is supposed to be named after Rájá Bel Brihm, and is said to have been constructed in the year 1200 Samvat = 1143 A. D. This date, which was that given to both Mr. Wigram and myself, is probably only a round number. Mr. Carne, formerly Assistant Collector in charge of Mahoba and Jaitpur, was told that the exact date was 1268 S. = 1211 A. D., but that date is certainly too late, the Chandels having lost Mahoba in 1182 A. D.

A Bel *khera* exists at Bijanagar near Mahoba, and at Ajnar there is an ancient well named Belá, and ascribed to the Chandels.

Several instances are known of works ascribed by tradition to Chandel chiefs who find no place in the authentic lists of regnant monarchs; for example, the Ratan Ságar, with a fine temple on the embankment, at Urwára in Pargana Mahoba, and the Barsi Talao, with temples, near Pabra in the same pargana, are ascribed respectively to Ratan Brahm and Bár or Bál Brahm Chandels, and are evidently of Chandel origin.

Bár Brahm (Bála Varmma) is also believed to have built the fort of Bárigarh, now in native territory, some ten miles distant from Mahoba.

Bár Brahm and Ratan Brahm, like Bel Brahm, are included in the bardic lists. All three were probably, like Pratápa Varmma and Sallakshana Varmma of the inscriptions, younger scions of the royal house, and really executed the works which bear their names.

There is no reason I think to doubt Sir Wm. Sleeman's assertion that in his time an inscription existed at Kondalpur, in which the name of the Chandel Rájá was read as 'Mulun Deo' and the date as Śamvat 815.

There was no Rájá named Malan Deo, and it is an obvious correction to read Madana Deva, and it is equally obvious that the date 815, if correctly read, should not be referred to the Vikrama era, for there were no Chandel Rajas in 758 A. D.

Dates have often been misread, and I think it most likely that in this case the first figure was wrongly read, and that the real date was 915 of the Chedi Samvat = A. D. 1164, which year would fall within, but at the close, of Madana Varmma's reign.

Sir Wm. Sleeman's statement that Bilhari was included in the Chandel dominions is fully borne out by the following statement, which appears to be based on independently obtained information :—

"A local governor appointed by the Chandels of Mahoba was stationed at Bilhari in Jabalpur, to whom the territory, now comprised in the Ságor and Damoh districts was subordinate."*

The fact of a temporary Chandel occupation of Bilhari is not inconsistent with the existence of a Kulachuri inscription, dated 909 K. S. = 1158 A. D., at Bharhut far north of Jabalpur,† for I think it probable that the Chandel attack did not take place till about 1160, the Kondalpur inscription having been set up by Madana Varmma, according to my theory, in 1164.

But even if the Chandel success was gained at an earlier date, the Kulachuri chief at Bharhut may well have retained local power in subordination to the conqueror

The conquest of one native state by another does not necessarily imply the extinction of the dynasty of the defeated chieftain.

On a review of all the evidence I believe that late in the reign of Madana Varmma the Chandel dominions included Bilhari, which was administered by a local governor, who was most probably a scion of the Chandel house, known as Rájá Belá or Belo.

(XVI.) *Paramárdi Deva (Parmál or Parmár).*

Date circa 1165 to 1202 A. D.

This prince is commonly, though inaccurately, spoken of as the last of his dynasty; his defeat by Rájá Pirthiráj of Delhi having impressed itself on the popular memory.

He appears to have been the son of Madana Varmma, and was certainly his immediate successor, but it is curious that none of the published

* Central Provinces Gazetteer, 2nd edition, p. 176.

† Arch. Report, IX, 94.

inscriptions give the genealogy of Paramárdi Deva; nor is any coin of his known, and there is only known one inscription of his of which we can say that we are certain of the date.

General Cunningham indeed (Arch. Rep. II, 447) affirms that "of Parmál or Paramárdi Deva there are three dated inscriptions ranging from S. 1224 to S. 1240, or A. D. 1167 to 1183."

But on consulting his list of inscriptions on the next page we find that one of them is the Mahoba inscription dated 1240, and another Maisey's No. I inscription, which is cited as being dated 1228 S.

Now, the Mahoba inscription dated 1240 S. is that at present built into the wall of the Engineer's bungalow near Mahoba, from which the Rájá's name is lost, and the date of Maisey's No. I inscription is extremely doubtful.

As published and translated that inscription bears the date of S. 1298 and not 1228.* Other readings are S. 1209 and S. 1198.‡

The inscription undoubtedly commemorates a king named Paramárdi Deva, but until the date is definitely settled, we are not entitled even to assume that the person commemorated was Paramárdi Deva Chandel, who died in 1202 A. D. or S. 1259.

Of the proposed readings of the date the only one which falls within the limits of Parmál's reign is that of S. 1228 = A. D. 1171, proposed by General Cunningham, but unfortunately he assigns no reason for so reading the date, and it is therefore impossible to accept with confidence his reading.

The "three dated inscriptions" of Parmal thus dwindle down to one, that, namely, dated S. 1224 at Mahoba, and even this document is not now to be found, and General Cunningham gives no hint as to the nature of the inscription, or the precise locality where he found it.

Rájá Parmál is the only prince of the Chandel race whose name is widely known, but were it not, (as we shall see in Part III of this paper) that he is mentioned by the Muhammadan historians, we should know almost nothing of his reign.

The detailed particulars respecting it given by Chand and popular tradition are in part obviously mythical, and in part, (e. g., as to the alleged retirement to Gya) can be proved untrue.

There is not even any building or tank of which Parmál can be said with certainty to have been the constructor. Popular tradition ascribes to him in a vague way a great part of the antiquities in the country.

* J. A. S. B. XVII, (1) pp. 313-317.

‡ Gazetteer, N. W. P. Vol. I, 15, note. The same note refers to inscriptions of Parmál's dated 1177 and 1178 A. D. apparently on the authority of Pogson's History of the Boondelas, but I have been unable to verify the reference.

Parmál was certainly defeated and expelled from Mahoba by Rájá Pirthiráj of Delhi in 1182 A. D., and the tale of the conflict as told by Chand has captivated the popular imagination and has become the theme of innumerable songs and legends throughout Upper India.

Chand would have us believe that the defeat was so crushing and overwhelming, that only 200 of Parmál's followers escaped destruction, but his story is manifestly a gross exaggeration, for twenty years later Parmál was able to make a "desperate resistance" against Kutb-ud-dín, and was the master of great wealth, which became the spoil of his Musalmán conqueror.

The heroes of Chand's Mahoba Khand are the miraculously endowed brother heroes, Alhá and Udal, and the poet, in order to enhance their glory, depicts Parmál as a weak coward, swayed by the treacherous counsels of Mábil Parihár. All this is probably pure myth, for if Parmál could make a "desperate resistance in the field" in 1202, it is not likely that he would have sought personal safety in craven flight in 1182.

It is not known whether or not Parmál succeeded in retaining during any part of his reign the territories near the Narbadá, which had been conquered by his predecessor Madana Varmma Deva, but he certainly cannot have retained them after the loss of Mahoba in 1182.

The victory of Pirthiráj may not have been so overwhelming as it is represented by legend to have been, but it certainly marks an epoch in Bundelkhand history, and after 1182 the Chandels seem to have sunk to the position of small local Rájás, their degradation being consummated by Kutb-ud-dín's raid in 1202.

I therefore consider 1182 as the date of the close of the Chandel period, that is to say, of the period during which the Chandels were the leading power in Bundelkhand, and during which they wrought works deserving to be held in remembrance.

The few and indistinct existing notices of Parmál's obscure successors will be discussed in Part III of this paper.

Chronological Table of the Chandel Dynasty 831—1182 A. D.

No.	Rájá.	Date A. D.	Event.	Authority.
1	Nánika.	831	Accession, and overthrow of Pariháras at Muhoba.	Tradition and calculation.
2	Vákpatí.	850	Accession.	Date calculated.
		862	Bhoja king of Kanauj in possession of Chanderí.	Inscription at Chanderí, Arch. Report, IX, 84.
3	Vijaya.	870	Accession.	Date calculated.
4	Ráhila.	890	Accession.	.....
5	Harsha.	910	Accession.	.....
6	Yáso Varmma.	930	Accession.	.....
7	Dhanga.	950	Accession.	.....
		954	Building temple at Khajuráho.	Chaturbhuj inscription.
		978	Assisted in battle of Langhán.	Farishta.
		998	Grant of land.	Nunaura, No. II inscription.
8	Gaṇḍa Deva.	999	Death at Prayág.	Láláji inscription
		999	Accession.	Ditto and Mau Chhatarpur inscription.
		1008	Assisted Rájá Jaipál of Lahore against Mahmúd of Ghazní.	Farishta.
		1011	Rájá Kokalla.	Inscription at Khajuráho.
		1021	Conquered Kanauj.	Farishta.
		1023	Surrendered Kálanjar to Mahmúd of Ghazní.	
9	Vidhyádhara Deva.	1025	Accession.	Date calculated.
		1030	Gáṅggaya Deva king of Chedi ruling at Tripuri.	Abú Rihán.
10	Vijaya Pála Deva	1035	Accession.	Calculated date.
11	Kirtti Varmma Deva the First, <i>alias</i> Deva Varmma Deva <i>alias</i> Bhúmipála.	1049	Accession.	Date calculated.
		1050	Grant of land by Deva Varmma Deva.	Nunaura, No. I inscription.
		circa.		
		1080	Defeat of Karna of Chedi. First issue of Chandel coinage.	Exact date conjectured.
		1097	In possession of fort of Deogarh.	Inscription at Deogarh.

No.	Rájá.	Date A. D.	Event.	Authority.
12	Sallakshana Varmma Deva.	1100	Accession.	Date calculated.
13	Jaya Varmma Deva <i>alias</i> Kirtti Varmma Deva the Second.	1110	Accession.	Date calculated.
		1116	Lálájí inscription re-written.	Lálájí inscription.
14	Prithví Varmma Deva.	1120	Accession.	Date calculated.
15	Madana Varmma Deva.	1130	Accession.	Date calculated.
		1131	Image of Varadá set up at Kálinjar.	Maisey's, No. IV inscription.
		1133	Grant of land.	Augásí copper plate.
		circa.		
		1143	Construction of Bela Tál at Jaitpur.	Tradition.
		1154	Jain image set up at Mahoba.	Nemináth inscription.
		1158	Ditto ditto.	Sumatináth ditto.
		"	Ditto, at Khajuráho.	Sambhunáth ditto.
		circa.		
		1160	Conquest of Chedi.	Date conjectured.
		1163	Jain image set up at Mahoba.	Ajitanáth inscription.
		1164?	Inscription set up at Kondalpur?	Sir Wm. Sleeman.
		circa.		
		1160	Rájá Belo built Singorgarh. Bilhari held	Ditto, and Central Provinces
		1165	by a Chandel governor.	Gazetteer.
16	Paramárdi Deva, known as Parmál or Parmár.	1165	Accession.	Date calculated.
		1167	An inscription recorded.	Inscription.
		?1171	Inscription recorded at Kálinjar.	? Inscription.
		1182	Capture of Mahoba by Píthiráj of Delhi.	Inscription of Píthiráj (unpublished).

Inscriptions of the Chandel Dynasty of Bundelkhand.

No.	Inscription.	Date.		Reference.
		Samvat.	A. D.	
1	Chaturbhuj.	1011	954	The inscription is on a large slab built into the wall on the right side of the entrance to the Chaturbhuj temple at Khajuráho. It has never been published nor translated. Noticed in Arch. Report, II, 426.
2	Jinanáth.	1011	954	On left jamb of door of Jinanáth's temple at Khajuráho. Never published nor translated in full. Abstract translations in Arch. Report, II, 433 and J. A. S. B. XXIX, p. 395. See also J. A. S. B. XLVIII, Part I, p. 287 and plate.
3	Nunaura, No. II.	1055	998	Copperplate; original in Indian Museum. Transcribed and translated in full in J. A. S. B. XLVII, pp. 80 seqq.
4	Láláji or Viśvanáth.	1056	999	On a large slab built into wall inside entrance of Láláji or Viśvanáth temple at Khajuráho. Translated by Mr. Sutherland in J. A. S. B. for 1839. Vol. VIII, p. 159, but with many errors, some of which were corrected by General Cunningham in Proc. A. S. B. for 1865 (1) p. 99.
5	Nunaura, No. I.	1107	1050	As No. 3.
6	Deogarh.	1154	1097	Engraved on rock. Neither published nor translated; referred to in Arch. Report, IX, 108.
7	Inscription at Mahoba.	—	—	Gave genealogy from Dhanga to Kirtti Varmma. Mentioned in Arch. Report, II, 447, but never published nor translated, and the original not now to be found.
8	Supplement to Láláji inscription.	1137	1116	As No. 4.
9	Maisey's No. IV.	1188	1131	Original at Kálinjar, near figure of 'Mahádeo ká putra'; letters very faint. Transcribed and translated in J. A. S. B. XVII, (1) pp. 191 and 321-322. Text and translation require revision. Erroneously mentioned as dated in S. 1288 in Arch. Report, II, 448, number 33.
10	Augási.	1190	1133	Copper plate; original with Mr. A. Cadell, C. S. Facsimile and transcript and translation in J. A. S. B. Vol. XLVII, Part I, pp. 73 seqq.

No.	Inscription.	Date.		Reference.
		Samvat.	A. D.	
11	Nemináth.	1211	1154	Jain Statue at Mahoba. Noticed by General Cunningham in Arch. Report, II, 448. The position of the statue is not known.
12	Sambhunáth.	1215	1158	Jain statue at Khajuráho. Translated in Arch. Report, II, 435 and noticed <i>ibid.</i> p. 448. Position of statue now is not known.
13	Sumatináth.	1215	1158	Jain statue lying in water under embankment of Kirat Sagar at Mahoba. Facsimile of part of inscription in J. A. S. B. Vol. XLVIII, Part I, Plate XV.
14	Ajitanáth.	1220	1163	Jain statue at Mahoba, position not now known. Noticed in Arch. Report, II, 448.
15	Mau-Chatarpur.	—	—	Translated by Lieut. Price in Asiatic Researches, XII, 351.
16	Kondalpur. (?)	?	1164	Mentioned as existing at a temple in Kondalpur, Central Provinces, and said to be dated 815 Samvat by Sir Wm. Sleeman in J. A. S. B. for 1837. Vol. VI, (2), p. 627 note. <i>Vide supra</i> discussion of reign of Madana Varmma.
17	Mahoba.	1224	1167	Inscription at Mahoba, mentioned in list Arch. Report, II, 448, but nature of inscription and precise locality not mentioned. Original not now forthcoming.
18	Maisey's No. I.	? 1228	? 1171	J. A. S. B. XVII, (1) pp. 313-317. Gazetteer N. W. P. Vol. I, p. 16 note. Arch. Report, II, 448. Original at Kálinjar.
19	—	1239	1182	Unpublished inscription of Prithiráj, referred to by Genl. Cunningham, Arch. Report, IX, 153, and in private letter. It records defeat of Parmál by Pirthiráj.
20	Mahoba, inscription at bungalow.	1240	1183	Abstract given in Proc. A. S. B. for 1879, p. 243. Original at Engineer's bungalow near Mahoba. Full text and translation not yet published.
21	Dahi copper plate.	1337	1280	Arch. Report, II, 455. In No. 34 of table <i>ibid.</i> p. 448, the name of the Rájá is wrongly given as Vira Varmma. Neither original nor copy forthcoming, nor translation.
22	Jayadúrگا, (P Ajegarh or Kálinjar) Inscription.	1345	1288	J. A. S. B. VI, 881, and Part III of this essay.
23	Maisey's No. II.	—	—	J. A. S. B. XVII, (1) 317-320, transcript and translation; original at Kálinjar. No date; but quoted in No. 36 of table Arch. Report II, 448 as being dated S. 1372 = A. D. 1315.

PART III.

THE POST-CHANDEL PERIOD (1182-1352 A. D.)

● The period of Bundelkhand history between the capture of Mahoba by Rájá Prithiráj in 1182 A. D.* and the rise of the Bundela power in the fourteenth century is extremely obscure, and has, for lack of materials, been passed over almost in silence by writers on the history and antiquities of Bundelkhand.

I cannot pretend to recover very much of the forgotten history of this period, but a minute examination of local traditions, and collation of these with the few available historical authorities remove to some extent the darkness which has hitherto enveloped the history of Bundelkhand for about a century and a half.

A curious error has been made by several writers† with regard to the date of Kutb-ud-dín Aibak's expedition into Bundelkhand, and, inasmuch as the discussion to follow requires the exact fixation of this date for a basis, I must first examine this point.

General Cunningham asserts that the Chandel Rájá Parmál was twice attacked and defeated by Kutb-ud-dín Aibak.

I propose to show that the assertion in question is based on a misconception of the meaning of Farishta, the authority cited, and that in reality but one attack was made.

General Cunningham's words are :—

"After this (*scilicet* the Chauhán victory) Parmál reigned at Kálinjar, where he was attacked by Kutb-ud-dín Aibak, to whom he capitulated in A. D. 1196.

"He was again attacked and defeated in 1202, when Aibak, dismounting his cavalry, laid siege to Kálinjar."‡

Particulars of the siege are then given, with a reference to Briggs' Farishta, Volume I, pages 180 to 197.

I have been much surprised, on consulting that work, to find that Farishta really speaks of but one expedition by Kutb-ud-dín against Kálinjar, that, namely, which took place in A. H. 599 = A. D. 1202.

* This date is equivalent to 1239 Samvat and has been adopted by General Cunningham on the authority of an unpublished inscription of Prithiráj in his possession. The date is given sometimes as 1183 or 1184.

† *E. g.*, besides General Cunningham, by Elphinstone (Cowell's edition, pp. 365-6) and N. W. P. Gaz. I, 527.

‡ Arch. Survey Report, II, 456. For a discussion of the correct meaning and spelling of the word Aibak, and some remarks on the date of the expedition, see Mr. Blochmann's paper in J. A. S. B., Vol. XLIV, Part I, pp. 277-279.

On page 180 the words of our author are—"In the year 598 Kutb-ud-dín marched from Dehli, and reduced Nehrwala, in Guzerat, with all its dependencies. After his return, he took the fort of Kálinjar, Kálpí, and Budaon."

Farishta then proceeds with the history of Muhammad Ghorí (*aliá*. Shaháb-ud-dín) and an account of the early life of Kutb-ud-dín, and continues on p. 197 as follows:

"In the year 599, he mustered his forces, and marched against Kálinjar, where he was opposed by the Rájá of that country, whom he defeated; then, dismounting his cavalry, he laid siege to the fort." The details are then related as quoted by General Cunningham, and Farishta goes on to say—"Kutb-ud-dín now marched to Mahoba, the capital of the principality of Kálpí, which place he also subdued, together with Budaon, lying between the rivers Jumna and Ganges."

It is obvious that the passage on page 197 is only an amplification of that on page 180, and that both passages refer to the same events.

In the earlier passage Farishta, does not say, as he is made to say by General Cunningham, that Kutb-ud-dín reduced Kálinjar in A. H. 598 = A. D. 1196, but he says that in that year he reduced Nehrwala in Guzerat, and, 'after his return' took Kálinjar, Kálpí, and Budaon, all the four places named being separated from each other by long distances.

Thus it is clearly proved that the supposed conquest of Mahoba, and Kálinjar by Kutb-ud-dín in 1196 A. D. never really occurred. Gwalior, the other great fortress of Bundelkhand, was, however, attacked in that year by Kutb-ud-dín, who forced its ruler to pay tribute.*

It may be worth noticing that Dow's mistake† in calling by the name of Gola the Rájá of Kálinjar attacked by Kutb-ud-dín, was evidently due to his confounding the Rájá, who is not named by Farishta, with Gola Rai of Ajmír,‡ who is mentioned in pages 179 and 194, 195 of Brigg's translation.

The contemporary Táj-ul Maásir correctly states the name of the Rájá of Kálinjar as Parmár in a passage which I shall quote at length, as it is of considerable historical value, and affords further proof, if proof be needed, that Kutb-ud-dín's only expedition against Kálinjar occurred in 599 H.

Capture of the Fort of Kálinjar.

"In the year 599 H. (1202 A. D.) Kutb-ud-dín proceeded to the investment of Kálinjar, on which expedition he was accompanied by the

* Dowson's Elliot, II, 227-8.

† Quoted by General Cunningham *loc. cit.* and in Gazetteer, I, 16.

‡ For Gola Rai should be read "the Kola (natural son) of the Rai of Ajmír." (Dowson's Elliot, II, 214.) [The term *Gola* has been much misunderstood. It is most probably identical with the Rájput tribal name *Gora* or *Garud*. The Gora of Ajmír are well known; the substitution of *l* for *r* is not uncommon in Hindí; the spelling 'kola' is an error which has further led to the erroneous interpretation "natural son." Ed.]

Sahib-Kirán, Shams-ud-dín Altamsh. Encomiums on both warriors follow through several pages. 'The accursed Parmár,' the Rái of Kálinjar, fled into the fort after a desperate resistance in the field, and afterwards surrendered himself, and 'placed the collar of subjection' round his neck, and, on his promise of allegiance, was admitted to the same favours as his ancestor had experienced from Mahmúd Subuktigin, and engaged to make a payment of tribute and elephants, but he died a natural death before he could execute any of his engagements. His Diwán, or Mahtea, by name Aj Deo, was not disposed to surrender so easily as his master, and gave his enemies much trouble, until he was compelled to capitulate, in consequence of severe drought having dried up all the reservoirs of water in the forts. 'On Monday, the 20th of Rajab, the garrison, in an extreme state of weakness and distraction, came out of the fort, and by compulsion left their native place empty,' 'and the fort of Kálinjar which was celebrated throughout the world for being as strong as the wall of Alexander' was taken.

'The temples were converted into mosques and abodes of goodness, and the ejaculations of the bead-counters and the voices of the summoners to prayer ascended to the highest heaven, and the very name of idolatry was annihilated.' 'Fifty thousand men came under the collar of slavery, and the plain became black as pitch with Hindús.' Elephants and cattle, and countless arms also, became the spoil of the victors.

'The reins of victory were then directed towards Mahoba, and the government of Kálinjar was conferred on Hazabbaru-d-dín Hasan Arnal. When Kutb-d-dín was satisfied with all the arrangements made in that quarter, he went towards Badáún,* 'which is one of the mothers of cities, and one of the chiefest of the country of Hind.' "

Chand's story that Parmál (Parmár or Paramárdi) after his defeat by Rájá Prithiráj, retired to Gayá, and died there, is refuted by the sober and authoritative statement of the Muhammadan historian.

This is but one of many proofs, which might be cited, to show that the Chand Ráesa, as we now have it, is misleading, and all but worthless for the purposes of the historian.†

According to Chand the lieutenant named Pajún, who was left behind by Rájá Prithiráj, was driven from Mahoba by Samarjit, a son of Rájá Parmál, with the help of Narsingh, an officer of Rájá Jaichand of Kanauj.

* "Hammer (Gemäld, IV, 185) following Briggs (Farišta, I, 198) places Budaon between the Ganges and the Jumna, for which there is no authority in the original. It is in Rohilkhand, to the east of the Ganges."

† [The great Epic of Chand is hardly sufficiently known as yet, to warrant such a sweeping statement. Ed.]

Samarjit, according to the same authority, then became Rájá between Kálinjar and Gayá, and was ultimately killed by one Binao-ud-dín, a Musalmán.

It is very doubtful whether there is any foundation of fact for this circumstantial narrative, because we know for certain that Rájá Parmál continued to reign at Kálinjar till 1202 A. D. when he died and was succeeded, as we shall see further on, by Trailokya Varmma. It is, however, possible that his son Samarjit may have temporarily occupied Mahoba, and that he may have been killed by a follower of Kutb-ud-dín.

Passing over for the moment all further consideration of the names and order of succession of the Chandel descendants of Parmál, I shall proceed to discuss the history of Bundelkhand in the period succeeding his death, so far as the scanty materials available will permit.

The Kanungo family at Mahoba has preserved in writing certain traditions, which I shall now set forth as a basis for the discussion of the historical data procurable.

According to these traditions, Parmál was succeeded in the government of Mahoba by his son Samarjit.

In Samvat 1220 Shaháb-ud-dín attacked Delhi, and conquered Hindustan and wrested Mahoba from Samarjit, and granted it to Taur Súba, who ruled for fifty years. His government not being successful, the emperor granted Mahoba to his allies the Mewátis, who held the place for 40 years. Then the Gonds from Mandla attacked and plundered Mahoba and ruled there for 14 years. After this Manmath Gaharwár of Benares, a descendant of the family who ruled Mahoba, prior to the Chandels, recovered possession, and Gaharwárs ruled for 100 years.

Then Ajaipál, and Bhar and others, who were Jogis, and great magicians, one greater than the other, and were Rájás in Ujain,* advanced from that country. Ajaipál conquered Ajmír, and Rájá Bhar captured Mahoba, and ultimately both chiefs conquered all Hindustán. They hated the Musalmáns and oppressed them and drove them out of the cities, displeasing God thereby,† whereupon the Musalmáns laid their complaints before the king of Arabia, from which country Malik Hasn Shah came with an army and in a great battle defeated Rájá Bhar, whose sovereignty devolved on the king of Arabia. Rájá Bhar's fourteen sons were slain, and their wives, wrapping themselves in their garments, were consumed without the aid of earthly fire. Malik Hasn Shah was wounded in the battle and died at Mahoba, and his shrine exists to this day in the adjoining township of Fatehpur.

* In J. A. S. B., Part I, for 1877 p. 5, I unfortunately misread the MS. and printed "Jains and Jogis" instead of "Jogis from Ujain."

† This phrase shows that the tradition has passed through a Musalmán channel.

Then the emperor of Delhi became sovereign of the country, and made over Mahoba to the rule of the Khangárs of Garh Kurár.* Arjun Pál Gaharwár, who had been encouraged by the goddess Deví with a promise that he should found the Bundela Ráj, entered the service of the Khangár chief, who appointed him Bakshí of his army. On an occasion when the Khangárs had gone towards Bánda to attend a wedding, Arjun Pál lay in wait for them, and, attacking, slew them all. From his time, that is to say, from the year 1400 Samvat, is dated the rise of the Bundela Ráj.

No argument is needed to show that much of this legend is pure myth, but it can be forced to yield some grains of fact.

The tradition states wrongly the date of Shaháb-ud-dín's expedition. The attack on Mahoba and Kálinjar Kutb-ud-dín Aibak, the viceroy of Shaháb-ud-dín, really took place, as has been shown above, in A. H. 599 = 1202 A. D. = 1259 Samvat. Assuming then for a moment that the tradition, though wrong in dates, rightly gives the order of events, the time for these events is cut short at the beginning by 39 years.

I cannot find any mention elsewhere of Taur Súba, but there is no special reason to suppose that the name is an invention. The period of 50 years, assigned to his rule, is, however, undoubtedly excessive. His successors are said to have been Mewátís, and I should be inclined to date their arrival at some time in the first half of the 13th century, for during that period they are frequently mentioned as engaged in conflicts with the kings of Dehli, and they may well have succeeded in obtaining for a short time the governorship of Mahoba.

Násir-ud-dín temporarily reduced the Mewátís in the years 1247-50 A. D.

The mosque known as the Mughal mosque, which stands on the east end of the fort hill at Mahoba, and is built of the materials of a richly adorned Jain temple, was erected, it is said, by the Mewátís.

That the Gonds did really attack Mahoba at some time after the defeat of the Chandels is rendered probable by the existence of a few village traditions which refer to a post-Chandel occupation by Gonds.

The story that the Gonds were succeeded by Manmath of the Gaharwár dynasty is not corroborated from any other source, and the period of a hundred years assigned by the legend to this Gaharwár dynasty is of course impossible. I therefore reject altogether this part of the legend.

* Garh Kurár is in the Orchha State some 17 miles from Jhánsi. The origin of the Khangárs is not known. They were probably a branch of one of the wild tribes such as Gonds, Kols, or Bhils. A friend suggests to me that the word Khangár may simply mean 'swordsmen,' and be derived from Sanskrit खड्ग a sword.

The legend about Ajaipál and Bhar is very curious, and has some solid foundation, for there is sufficient independent evidence (as will presently be shown) to prove beyond doubt that a Bhar Ráj did at one time exist at Mahoba.

The statement that Ajaipál and Bhar conquered all Hindustán must of course be regarded as a gross exaggeration, but even this statement is not altogether baseless.

I shall now proceed to examine in some detail the evidence which proves the former existence of Bhar chiefs at Mahoba and in the neighbourhood of, or at, Kálinjar.

The Kánungo family of Mahoba possess a copy of a *sanad*, which copy is attested by the signature of the Assistant Superintendent of Jalaun under date 17th December 1850.

The document from which the copy was taken, was, it is said, on paper and was lodged in court soon after the annexation of the Mahoba pargana in 1840, and was no doubt, along with the rest of the records, destroyed in the mutiny.

The language of the existing copy is modern Hindí, and for this reason, and also because the document destroyed in the mutiny was written on paper, it is certain that that document was not in itself an original, for a *sanad* dated 1337 Samvat would have been written on copper, and would almost certainly have been in the Sanskrit language. I see, however, no reason to suppose that the existing copy represents a forgery; I believe that it is a copy of a translation of a genuine grant, the original of which was lost long ago.

The document is to the following effect;—"On behalf of Srí Maharáj Adhiráj, Srí Maharája Sri Rájá Kírat Singh Jú Bhar the grant is made for subsistence to Srí Kanungo Chaudhrí Mádhó Rám, Mansabdár, Faujdár, who exercises the functions; he is granted the villages Tíká Mau and Bíjanagar and Kaproera,* and 2 per cent. and a present of Rs. 2 for each village, and 9 *dáms* for each village at the *chabútra*, and in the city the customary dues, and in the town 350 bighas; let no one interfere, and let them be loyal.

Monday 9 Mágh Sudi,
Samvat 1337,
At Kálpí."

* These villages are all within a few miles of Mahoba, but the third is now in Native Territory.

In the absence of the original it is impossible to pronounce with certainty on the authenticity of this grant, but there is at least no doubt as to the genuineness of the copy now in the Kanungo's possession, and the family still hold revenue free part of the '350 bighas in the town,' and they say that under the various native rulers they enjoyed the transit and other dues referred to in the grant.

The note 'at Kálpí' is explained by the consideration that Kálpí and Mohaba were generally included in a single district. In Kutb-ud-dín's time Mahaba was "the capital of the principality of Kálpí."

If then this Kánungo's *sanad* be authentic, one date (*viz.*, 1337 S. = 1280 A. D.) in the period of the Bhar rule at Mahoba is fixed decisively, and we also learn that the Bhar dominions included Kálpí.

These dominions, as we shall see, also included Kálinjar, and I am disposed to identify the Kírat Jú Bhar of the Kanungo's *sanad* with the Rájá Kírat Pál of Kálinjar who is mentioned in a Mahoba tradition obtained from a different source.

This tradition is recorded in a long undated Persian manuscript belonging to the guardian of the shrine of Pír Mobárik Sháh at Mahoba, which gives an account of the foundation of that shrine in the year 1309 Samvat, in which year it is related that Rájá Kírat Pál of Kálinjar visited the shrine and endowed it with 700 bighas of land revenue free. This land is still held revenue free by the guardian of the shrine.*

The historical value of this tradition is much impaired by the fact that the manuscript gives four inconsistent notes of time.

It records that, (a) the shrine was founded by Pír Mobárik Sháh, a disciple of Ráju who was a disciple of Jahána Jahángasht; (β) in the Samvat year 1309; (γ) during the reign of Sultán Ibráhím Sharkí; and, further, (δ) that, after the time of Rájá Kírat Pál of Kálinjar, the shrine was visited by Tughlak Sháh and Prince Daryá Khán and others.

Now, (a) Ráju son of Sayyad Jalál Makhdúm Jahániya, erected his father's tomb at Kanauj in A. H. 881 = A. D. 1476†; (β) Samvat 1309 = A. D. 1252; (γ) Sultán Ibráhím Shákí reigned 1401-1440 A. D. and (δ) the date of Ghiyás-ud-dín Tughlak's mosque at Mahoba is A. D. 1322, and Daryá Khán was killed in A. D. 1387.

Supposing there to be any truth in the narrative at all, I accept the date 1252 A. D. as being in itself much more probable than any one of the other inconsistent dates which might be assumed by calculation from the data given above.

* The exact area as recently surveyed is 637 bighas, 14 biswas. Fuller details of the Mobárik Sháh legend will be found in the Hamirpur Settlement Report, Allahabad, 1880, p. 29.

† Cunningham, Arch. Report, I, 289.

We may be quite certain that the massive temple, on the site and with the materials of which the shrine of Pír Mobárik Sháh is constructed, was not allowed to remain until the middle or end of the 15th century A. D:

Assuming then that the date 1309 S. = 1252 A. D. is correct, it is difficult to avoid identifying this Rájá Kírat Pál with the Rájá Kírat Singh of the *sanad*. The one reign may easily have embraced the dates 1252 and 1280 A. D. As we shall see presently, Kírat Pál of Kálinjar, if he really flourished in the year 1280 A. D. cannot have been a Chandel prince, for the Chandel Rájá in that year was Sandhira Varinma.

In another paper I have already mentioned* that the local tradition of Mauza Bharwára, (which village is situated about 21 miles W. N. W. of Mahoba), ascribes the foundation of that village to Lodhis in the year 1300 S. = 1243 A. D. during the reign of Rájá Bhar of Mahoba.

The neighbouring village of Bijaipur is likewise believed to have been founded by Lodhis during the time of the Bhar Ráj. It was then seized for a time by the Chhindi or Chheri Bheri Thákurs (who are remembered in many villages in the neighbourhood, and are by some identified with the Bhars), and was recovered by the Lodhis under the leadership of Amán Báli in 1400 S. = 1343 A. D.

The people of Bhatcora Kalán, in the same part of the country, have a tradition that the original Lodhi inhabitants of their village were destroyed by the Chheri Bheri Thákurs, with the exception of one woman with child, who escaped. Her son Amán Báli on reaching man's estate slew the Chheri Bheri Thákurs, while they were intoxicated at a festival, and cast their bodies into a well.† His son founded twelve and a half villages, including Bharwára and Bijaipur. The dates given in these traditions are evidently round numbers, and there can be no doubt that in reality the colonization of the twelve and a half villages must have occupied a considerable time. Tradition always foreshortens, so to speak, the picture of the past. The above quoted traditions may I think be regarded as harmonizing with each other as closely as it is reasonable to expect.

The Muhammadan historians afford another clue to the date of the Bhar chiefs of Kálinjar and Mahoba.

Farishta (Briggs, I, 237) relates that: "In the month of Shaban 645, Násir-ud-dín Mahmúd proceeded with his troops through the country which lies between the rivers Ganges and Jumna, and after an obstinate siege, the fort of Bitunda‡ yielded to his arms. He then continued his

* J. A. S. B., Part I, for 1877. page 5.

† Similar traditions as to the destruction of Ahírs, Khangárs and other tribes by Lodhi or Thákur invaders are not uncommon in Bundelkhand.

‡ The reading of this name is doubtful.

march towards Kurra, Ghiás-ud-dín Balban commanding the vanguard. He was met at Karra by the Rájás Dalaki and Malaki, whom he defeated and plundered, taking many of their families prisoners. These two Rájás had seized all the country to the south of the Jumna, and had destroyed the king's garrisons from Malwa to Karra. They resided at Kálinjar. After these exploits Násir-ud-dín returned to Delhi."

Shaban A. D. 645 = Dec. 1247 A. D. the attack on "Dalaki and Malaki," therefore took place in 1248 A. D.

Col Briggs was of opinion (*note*) that "the Muhammadan author from whom Farishta copies, has, probably, made some mistake in the names," but the names can now be shown to be substantially correct.

It is related by Minháj-us-Siráj in the *Tabakát-i-Násirí*, that in 645 H. (*i. e.*, early in 1248 A. D.) the imperial army under Ulúgh Khán, marched to Karrá, and "there was in this neighbourhood a Rána (ران بود) who was called Dalaki-wa-Malaki. He had many dependants, countless fighting men, great dominions and wealth, fortified places, and hills and defiles extremely difficult of access. All these he (Ulúgh Khán) ravaged.

"He took prisoners the sons, wives, and dependants of the accursed one, and secured great booty. He secured 1,500 horses of a peculiar breed, which he brought in for the use of the army. His other booty may be inferred from this."*

Minháj-us-Siráj gives another account further on in his book of the expedition against Dalaki-wa-Malaki, which is worth quoting, because it contains some interesting details not given in the earlier passage of the *Tabakát-i-Násirí*, nor by Farishta.

"Ulúgh Khán was sent with some other generals and a Muhammadan force to oppose Dalakí-wa-Malakí.

"This was a Rána in the vicinity of the Jumna, between Kálinjar and Karrá, over whom the Ráis of Kálinjar and Málwa had no authority. He had numerous followers and ample wealth; he ruled wisely; his fortresses were strong and secure; in his territories the defiles were arduous, the mountains rugged, and the jungles many. No Muhammadan army had ever penetrated to his dwelling place.

"When Ulúgh Khán reached his abode, the Rána took such care for the safety of himself and his family, that he kept quiet from the dawn till the time of evening prayer, and when it grew dark he fled to some more secure place.

"At daybreak, the Muhammadan army entered his abode and then pursued him, but the accursed infidel had escaped into the lofty mountains, to an inaccessible spot, impossible to reach except by stratagem and the use of ropes and ladders. Ulúgh Khán incited his soldiers to the attempt,

* Dowson's Elliot, II, 348.

and under his able direction, they succeeded in taking the place. All the infidel's wives, dependants and children fell into the hands of the victors with much cattle, many horses and slaves. Indeed the spoil that was secured exceeded all computation.

At the beginning of Shawwál 645 H. (Feb. 1248), the force returned to the royal camp with their booty.”*

It would appear from this passage that Farishta is in error when he asserts that Dalaki-wa-Malakí resided at Kálinjar. His abode was between Kálinjar and Karra, and no Muhammadan army had ever penetrated to it, a description which by no means applied to Kálinjar, which had been visited both by Mahmúd and Kutb-ud-dín. The contemporary author further is careful to point out that the Rána Dalaki-wa-Malakí was distinct from the Rái of Kálinjar, who had no authority over him.

At first sight no connection is perceptible between the Rájá Dalaki-wa-Malakí and the Bhar chiefs of Kálinjar and Mahoba, but the argument developed in the following extract raises at the least a strong probability that they are identical.

“The Bhars up to a late period, occupied and owned considerable portions of Etá, Cawnpore, Fatehpur, and Allahabad. . . . tradition points them out as the rulers of the middle and lower Doáb at an early period. Mr. Benett in a note† on the Bhar kings of Eastern Oudh, quotes the local traditions regarding Bal and Dal, the great Bhar heroes of that province, whose names appear in the legends of 1000 to 1400 A. D.

• “Again the ancestors of the great Kánhpuriya clan of Rájputs, Sahas and Rahas, are said to have completed the conquest of the western half of the Partábgarh district in Oudh, by inflicting a decisive defeat on the Bhars, whose leaders Biloki and Tiloki were left dead on the battle field.

“The Bais also have a tradition that the founder of the house of Dúndia Khera defeated the Bhar leaders Dal and Bal,‡ on the banks of the Ganges in the Rái Bareli district; and another tradition has it that the Bhars were destroyed by Ibráhím Sháh Sharkí [who reigned 1401-1440 A. D.] at Dalamau on the Ganges, a place where Ahírs yearly congregate and offer up milk to the *manes* of Dal and Bal at their reputed tomb.

“Mr. Benett has elsewhere shown that the Kánhpuriya leaders, Sahas

* Dowson's Elliot, II, 366-7.

In Nov. 1261 A. D. Ulúgh Khán again marched “towards Málwa and Kálinjar.” Ibid. p. 368.

† Indian Ant. I, 265. See also the same writer's Report on the Chief Clans of Roy Bareilly, pp. 5, 17, 18.

‡ The names are given as Tiloki and Biloki by Mr. Benett (Clans of Roy Bareilly, 17) who says that the Bhar chiefs were left dead on the battle field, and that their names are preserved in the neighbouring villages of Tiloi and Biloi.

and Rahas, were contemporaries of Abhaichand, and lived in the thirteenth century."

The compiler of the Gazetteer then quotes the passage from Farishta, and the first extract from Minháj-us-Siráj, which I have given above, and proceeds with his argument as follows :

"From the similarity of names there can be no doubt but that the Dalaki-wa-Malakí of the Musalmán historians, the Tiloki and Biloki of the Kánhpuriyas, and the Dal and Bal of the Bais, refer to the Bhar princes of the Duáb, and west bank of the Jumna, who flourished about the middle of the thirteenth century."

After full consideration of the evidence I think that this identification must be accepted. The actual date of the great chief Dalaki-wa-Malakí (*alias* Dal and Bal, *alias* Tiloki and Biloki) is fixed by the Muhammadan historian, and the mention of the name in traditions referring to events of earlier or later date is easily explained when we remember the facility with which tradition in all countries associates the most diverse events with the names of popular idols.

It is not certain whether the name Dalaki-wa-Malakí and its equivalents are singular or plural. The Muhammadan historians use it as singular,* but the Rájput traditions affix the names to two brothers. I incline to accept the authority of the historian, and would suggest that the belief in the existence of the brothers has been caused by the circumstance that the name of the Rájá (whatever may have been its correct form) could be readily split up into two parts.

In a passage which just precedes my second extract from the Tabakát-i-Násirí the author notices that Ulúgh Khán, not only captured, but killed Dalaki-wa-Malakí (قتل واسردلكي وملكي).

The reader will perceive that the date thus obtained for the Bhar prince killed in 1248 A. D. in no wise interferes with our acceptance of the Mahoba dates 1252 and 1280 A. D. for Kírat Singh or Kírat Pál, who would appear to have been his immediate successor.

The detailed information given by the historians regarding Dalaki-wa-Malakí further prevents us from condemning as altogether incredible some of the traditional statements about Rájá Bhar of Mahoba. A chief, who in sober fact, had seized all the country to the south of the Jumna, and had destroyed the king's garrisons from Málwa to Karra, who ruled wisely, and who possessed the vast and peculiar wealth described by the historians, may well have been credited with having won the dominion of all Hindustán by magic arts. It is not even impossible that he may have come from Ujain in Málwa, as the legend affirms that he did. The movement of the

* Professor Dowson (II. 348 note) shows that in Farishta the name is singular, Briggs' translation being incorrect.

Bhars, so far as traced, has certainly been from west to east, and it may well be that the unknown origin of the tribe is to be sought in the hills and forests of Central India.

The Bhar chief having attained so great a power in 1247-48 A. D., it is evident that such power cannot have been gained in a day, and we may safely say that 1240 A. D. is the latest date that can be assigned for the rise of the Bhar rule in Bundelkhand. The Chandel power was shattered, first by Prithirāj in 1182 A. D. and again, and more completely, twenty years later by Kutb-ud-dīn in 1202 F.; the dynasty that had so long ruled over Chedi or Dáhal along the banks of the Narbada seems to have died out in the latter part of the twelfth century, and the Parihār kingdom of Gwáliar was overthrown by Altamsh in 1232 A. D. The country therefore was open to an attack, and I would place the incursion of the Bhars at a date not earlier than 1230 nor later than 1240.

The actual attack on Bundelkhand may have been, and probably was, directed from stations in the Doáb or Oudh, but, even admitting this, it may still be true that the Bhars came originally from Central India, and even that their great chief Dalaki-wa-Malakí came from that direction. However, I am not aware of any mention of the existence of Bhars to the south of the present Hamírpur District and of the line of the Kaimúr hills further to the east.

To return to our Mahoba Kánungo's tradition. Supposing that it correctly recites the *order* of events (excepting the episode of Manmath Gaharwár), then the rule of Taur Súba, that of the Mewátis, and that of the Gonds, must all be comprised between the years 1202 A. D., the date of Kutb-ud-dīn's attack, and the year 1240, the latest possible date for the Bhar inroad.

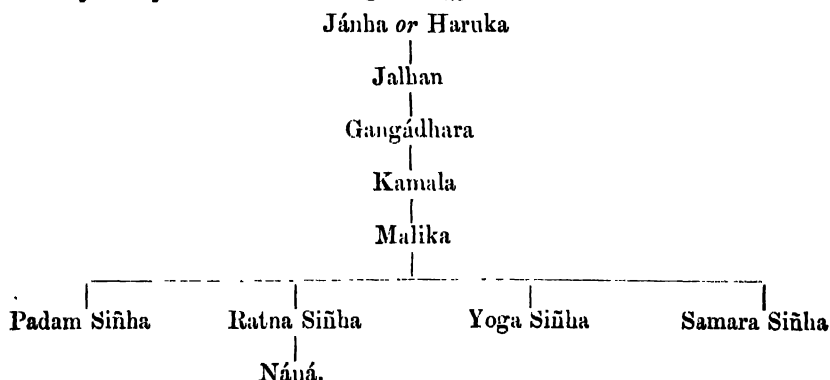
The compiler of the Gazetteer (*loc. cit.*) attempts another identification of Dalaki-wa-Malakí which requires some discussion.

A long inscription dated 1345 Samvat = 1288 A. D. and relating to a statue of Hari set up by one Náná in a place called Jayadúrga is preserved in the museum of the Asiatic Society in Calcutta.

This inscription, in the North-West Provinces Gazetteer (I, pp. 16 and 453,) is said to have been 'found in the fort of Ajaigarh,' but it is not really certain where it was found. Jas. Prinsep "conjectures that it is one of those presented by General Stewart from Ajaigarh.....or Kálinjar,"* and it is as likely to have come from one place as the other, if it came from either, for the two fortresses are only about 16 miles apart.

* J. A. S. B. VI. 881. In the translation the name of the town is given as Jayanagore, but in the Sanskrit transcript it is Jayadúrga. I shall call it the 'Jayadúrga inscription.'

Náná is described as belonging to the Káyath caste, and his descent is traced for seven generations back, his family being derived ultimately from the great Rishi Kasyapa. The residence of this family was at the famous city of Kausambi or Kosim on the Jumna, not many miles above Allahabad. Náná is praised in the following terms (vv. 24, 25). "His fame had reached the ears of the women on all sides; he was minister of the Chandrátraya kings (चन्द्रायाम्). He was known by the name of Náná, teacher of the religious laws and wisdom to the above dynasties, he was learned and agreeable, requiring not the advice of allies when he sent his horse to the Rájá Bhoja Varmina." The genealogy of Náná is as follows:—



The compiler of the Gazetteer without hesitation identifies the Malki of Farishta with the Malika of the inscription, and goes on to say—"On attaining the royal power, the Bhars were advanced to the dignity of Káyaths, and this fact is curiously borne out by inscriptions preserved in the old fort of Garhwa near Shiurájpur in the Allahabad District.*

"In addition to inscriptions of the Gupta princes of the second century, there are several others bearing date 1199 Samvat (1142 A. D.) recording gifts made by the Káyath Thákurs of the neighbouring villages, and several statues, three of which are dedicated to the Hindu triad. Along with these is one of the well known bearded Bhar figures, which in appearance and workmanship is of older date than the statues of Vishnu, Shiva and Brahma, and is connected with a local Bhar dynasty by tradition.

"Both the fort of Garhwa and the other old forts in the neighbourhood well fulfil the description of the Musalmán historian [*scilicet* of Dalaki-wa-Malaki's fortress], hidden as they are among the outlying spurs of the Kaimor range, and it is worthy of remark that the principal village near Garhwa still bears the name of Bhargarh."

* Garhwa is 25 miles S. W. of Allahabad.

The argument here stated is to me quite unintelligible, and I am unable to trace any connection between the conclusion and the premises. What proof is there of the startling assertion that the Bhars, on attaining royal power, were advanced to the dignity of Káyaths, and how is this fact, if fact it be, curiously borne out by inscriptions preserved in the old fort of Garhwa?

The only answer given in the Gazetteer to these questions is the statement that there are at Garhwa statues dedicated by Káyath Thákurs in 1142 A. D., and that there is at the same place a Bhar statue, apparently older, and connected with traditions of a local Bhar dynasty.

But it was already well known that a Bhar dynasty once ruled over the eastern Doáb, and the mere fact that a Bhar statue was found among ruins along with statues of a different date dedicated by Káyaths is no evidence of the identity of Káyaths and Bhars.

Unless then there exists other evidence of their identity at Garhwa or elsewhere, it is plain that the Garhwa inscriptions and sculptures give no reason for believing in such identity.

The identification of the Káyath Malika of the Jayadúrga inscription with the Bhar chief Dalaki-wa-Malaki is moreover inconsistent with the evidence of the other documents discussed in this paper, as well as with the testimony of the inscription in question, which records that Náná Káyath, grandson of Malika, was a servant of the Chandel prince. We have learned from the Tabakát-i-Násiri that Dalaki-wa-Malaki, so far from being a servant of the Chandels, lived in an inaccessible fortress, and that the Rai of Kálinjar had no authority over him. By the "Rai of Kálinjar" no other can be meant than the reigning chief of the Chandel house.

A brief discussion of the few known facts concerning the successors of Parmál on the Chandel throne will facilitate the comprehension of the mediæval history of Bundelkhand.

It has been shown above that the Mahoba tradition concerning the retirement and death of Parmál is absolutely untrue, and that the statement of the same tradition that he was succeeded in Mahoba by his son Samarjit is probably erroneous.

The only substantial evidence regarding the names and regnal order of Parmál's immediate successors is that of the Dahi inscribed copper-plate, formerly in the possession of Colonel Ellis, who was at one time Political Agent at Nagod.

Unluckily this inscription is not now forthcoming, and no good copy of it seems to exist. The original was probably destroyed in the mutiny with the rest of Col. Ellis' property. The inscription is known only from General Cunningham's imperfect account of it, which is as follows :

"In a copper-plate inscription obtained by Col. Ellis, which is dated in S. 1337 or 1280, the genealogy was read by his Pandit as follows:—

1. Kundo Barm Deo.
2. Parmara Dea.
3. Trilok Barm Deo.
4. Sandin Barm Deo.

From an imperfect impression, which I saw in 1848, I read these names as—

1. Yádava Varmma Deva.
2. Paramárdi Deva.
3. Sri Trailokya Varmma Deva.
4. Sri Sandhira Varmma Deva.*

I am now, however, inclined to think that the first name must be *Madana Varmma Deva*, but as I cannot refer to the original, I must leave this point doubtful."†

It is I think quite impossible to doubt that the first name really was *Madana Varmma Deva*, but we are at present concerned with the third and fourth names, the readings of which by General Cunningham and the Pandit substantially agree; there being no doubt that the second name was that of *Paramárdi*, popularly known as *Parmál* or *Parmár*.

The inscription then proves that *Parmál* was succeeded by *Trailokya Varmma Deva*, and, as we know that *Parmál* died at Kalinjar in 1202 A. D., *Trailokya*, who was probably his son, must have come to the throne in that year. *Trailokya's* successor *Sandhira Varmma Deva* was reigning in 1280* A. D., seventy-eight years after the accession of his immediate predecessor. It is very unusual to find so long a period covered by two reigns. It is probable that the long interval was distributed pretty evenly between the two reigns, and we may assume that the inscription is dated towards the close of *Sandhira Varmma's* reign, the termination of which may provisionally be dated in the year of the inscription 1230. The date of *Bhoja Varmma* 1288 A. D. in the *Jayadúrga* inscription shows that *Sandhira Varmma's* reign cannot have extended much beyond 1280 A. D.

General Cunningham was inclined to prolong *Trailokya Varmma's* reign till 1248 A. D., and to identify him with *Dalaki-wa-Malaki*, but it is needless to discuss that theory which is amply refuted by the previous discussions in this paper.

I am disposed to assign the larger part of the interval between 1202 and 1280 to the reign of *Sandhira Varmma*, on the ground that *Parmál*

* In the chronological table in Arch. Report, II, 448 the name *Vira Varmma* is by mistake printed, in lieu of *Sandhira*, as resting on the authority of the *Dahi* plate.

† Arch. Report, II, 455.

had a long reign (from about 1165 to 1202) and that it is probable that his son, when succeeding to the throne, must have been tolerably far advanced in years.

The supposition is allowable that the reign of Trilokya Varmma Deva ended in 1234 A. D., when Malik Nusratu-dín-Tábasí marched "against Kálinjar and Jamú." It is related that "the army marched on fifty days from Gwáliar, and great booty fell into its hands, so much that the imperial fifth amounted to nearly twenty-two lacs. When they returned from Kálinjar, they were encountered by this Rájá of Ijári, who seized upon the defiles on the river Sindí in the road of the returning army."*

On this supposition Sandhira Varmma would have reigned from 1234 to about 1250 A. D., and he would have occupied the throne at Kálinjar, when Dalaki-wa-Malaki was defeated by Ulúgh Khán in 1248 A. D. Kálinjar does not seem to have been attacked by Ulúgh Khán in that year, nor in 1251, when it is only recorded that Ulúgh Khán marched "towards Kálinjar," and defeated Jábir of Ijári (*i. e.* Cháhada Deva of Narwar).

It will be observed that the date 1337 S. = 1280 A. D. of the inscription of Sandhira Varmma Chandel is exactly the same as the date of the Kanungo's *sanad* which purports to be granted by Rájá Kírat Singh Jú Bhar. If the latter document be authentic, the Bhar was then in possession of Kálpí and Mahoba, and the Chandel prince's dominions cannot have extended far from the walls of Kálinjar.

If the legend which places Kírat Pal Rájá of Kálinjar in 1252 be correct, then Sandhira Varmma would appear to have been for a while expelled even from Kálinjar.

The power of the Chandel house must have been greatly weakened by the severe defeats in 1182 and 1202, but the ancient dynasty seems to have in general kept hold of Kálinjar and to have at times recovered Mahoba. The famous princess Dúrgavatí, who married Rájá Dalpat Sá of Garha Mandla in about the year 1545 A. D. and was killed in battle in 1564, is recorded to have been the daughter of the Chandel Rájá of Mahoba. This Rájá is probably to be identified with Kírat Rai the Rájá of Kálinjar who was killed when Sher Sháh besieged his fort in 1545.

The victories of the Musalmán emperors and of their generals in no wise interfered with the succession of the local Rájás, who were simply forced from time to time to pay tribute and acknowledge the suzerainty of the Delhi crown.

* *Tabakát-i-Násiri* in Dowson's *Elliot*, II, 368. The mention of Jamú in this account is puzzling and would suggest that the Kálinjar meant is the fort on the borders of Kashmir; but, as the Rájá of Ijári is identified with Cháhada Deva of Narwar, and the Sindí river is described as being on the road of the returning army, the Bundelkhand fort must apparently be meant; Jamú I do not understand.

Sandhira Varmma was probably immediately succeeded by Bhoja Varmma, but we know nothing of the names of the Chandel Rájás of Kálinjar between the time of Bhoja Varmma 1288 A. D. and that of Kírat Rai 1545 A. D., except that a person named Vira Varmma is mentioned in verse 22 of the much injured Kálinjar No. 2 inscription published by Maisay,* and he may have been a Chandel Rájá. This inscription appears to be undated, and I do not know why General Cunningham (*Arch. Rep.* II 448, Table) gives 1372 Samvat = 1315 A. D. as its date.

Let us now return to the examination of the Mahoba tradition.

The Bhar Rájá, according to the tradition, was destroyed by a Musalmán attack, led by a saint named Malik Hasn Sháh, who had been sent by the king of Arabia. The story about the appeal of the oppressed Muhammadans to the Arabian prince may of course be dismissed as pure myth, but the saint appears to have been a solid fact, for his tomb and shrine exist to this day, and the guardians of the buildings say that they once possessed a quantity of ancient documents relating to the shrine and to Rájá Bhar, which have now unfortunately all disappeared.

I see no reason to doubt that the Bhar Ráj at Mahoba was actually destroyed by a Muhammadan attack, in which the holy saint Malik Hasn Sháh was the leading spirit.

The date of the Bhar chief's rise to power in Bundelkhand has been fixed approximately in the year 1240 A. D., and, although the Bhars suffered a severe defeat near Karra in 1248, they do not seem to have been finally crushed, and they probably retained a hold on Bundelkhand for many years.

I am disposed to think that Malik Hasn Sháh's raid was connected with Alá-ud-din's invasion of Málwa in the year 1293 A. D., respecting which Ferishta writes—"In the year 692, the king [Jalál-ud-dín] marched against the Hindus in the neighbourhood of Mando and, having devastated the country in that vicinity, returned to Dehli. In the meantime, Malik Alá-ud-dín, the king's nephew, governor of Karra, requested permission to attack the Hindus of Bhilsa, who infested his province. Having obtained leave, he marched in the same year to that place, which he subdued and, having pillaged the country, returned with much spoil, part of which was sent to the king."†

The direct road from Karra to Bhilsa, if it did not pass through Mahoba, must certainly have passed near that place, and it is probable that Mahoba was then included in the "infested" province of Karra, as it certainly was during the reign of Firúz Tughlak in the middle of the following century.

* J. A. S. B. Vol. XVII, Part I, p. 319.

† Cf. C. Briggs' *Ferishta*, I, 303.

It is just possible that the Muhammadan attack on Mahoba may have taken place in 1295, the year that Alá-ud-dín returned to Karra from his daring expedition to the Dakhin, conducting his retreat "through extensive and powerful kingdoms; *viz.*, Málwa, Gondwára, and Kandeish;" but travelling thus, it is not likely that any part of his force would have come so far east as Mahoba.

The possible dates for the successful Musalmán attack on the Bhar leader are narrowly limited, on the one hand, by the date 1280 A. D. for Kírat Singh Bhar, and, on the other, by the date 1322 A. D. of Ghiás-ud-dín Tughlak's mosque at Mahoba, which is constructed of the materials of a Hindu or Jain temple and could not have been erected during the reign of a ruler hostile to Islám, as tradition affirms the Bhar chieftain to have been.

On the whole, the assumption of the date 1293 A. D. as that of the extinction of the Bhar Ráj at Mahoba, best accords with all the known facts. I therefore believe that the rule of the Bhars at Mahoba lasted from about 1240 A. D. till 1293 A. D.

Then, says the Mahoba tradition, the emperor of Dehli became sovereign of the country, and made over Mahoba to the Khangár rulers of Garh Kurár.

The emperor referred to I believe to be Alá-ud-dín, who ascended the throne in 1295, and whose general Ain-ul-Mulk Multání reduced Málwa in 1304. *Alá-ud-dín, when holding Karrá and Málwa, must have had control over the intervening territories of Mahoba and Garh Kurár.

I therefore conjecture that the Khangárs assumed charge of Mahoba not later than the year 1305 A. D., but they may have assumed charge in 1293 or 1295. The exact duration of their rule is not certainly known, but the Mahoba tradition affirms that it was ended by the treachery of Arjun Pál Gaharwár in the year 1400 S. = 1343 A. D.

This date has probably been remembered as a round number only, and may not be quite accurate, but I believe it to be approximately correct.

All accounts agree in tracing the Bundela genealogy back to a Gaharwár ancestor, although different traditions vary much as to the name of that ancestor and in other particulars.

By reckoning back the Bundela generations from a known date we can obtain an approximate date for the expulsion of the Khangárs by which to test the Mahoba traditional date.

The great Bundela chief, Rájá Chhatarsál, died in the winter of 1731 A. D.,† and he was (including Rudra Partáp) either the sixth or the seventh

* Briggs' *Ferishta*, I, 361.

† Captain Maitland, Political Agent at Charkhári, informs me that the exact date of Chhatarsál's death was Pús Badi 8 Samvat, 1788.

in descent from Rudra Partáp of Orchha,* and, according to two genealogies eight generations intervened between Sahanpál and Rudra Partáp, Sahanpál being named in some traditions as the destroyer of the Khangárs, in lieu of Arjun Pál.† We thus find either 15 or 16 generations from the death of Chhatarsál to the accession of Sahanpál, and, if a generation be taken as averaging either 20 or 25 years, the following limiting dates are obtained:—

A. D.

15 × 20 = 300.	(1731 — 300) = 1431.
15 × 25 = 375.	(1731 — 375) = 1356.
16 × 20 = 320.	(1731 — 320) = 1411.
16 × 25 = 400.	(1731 — 400) = 1331.

The required date is thus fixed as lying between 1331 and 1431, and most probably lies between 1330 and 1340, a result which well accords with the Mahoba tradition.

I therefore conclude that Mahoba was governed, as a dependency, by the Khangárs of Garh Kurár, subject to the lordship of the emperor of Delhi, from about 1300 to about 1340 A. D.

It is not known whether the early Bundela (Gaharwár) successors of Sahanpál exercised any authority over Mahoba or not, but it is probable that they did not, for, in or about 1337 A. D., Mahoba, with Karra and Dalamau, was in charge of Malik-us-Shah Mardán Daulat, who received the title of Nasír-ul-Mulk.

The process by which Gaharwárs became Bundelas is not clearly known, and in the genealogies the new clan name is accounted for by foolish myths.

The Bundelas are admitted to be of impure Rájput descent, and I think it most probable that they are the offspring of a marriage between the daughter of the Khangár Rájá of Garh Kurár and the Gaharwár adventurer who supplanted him.

The fact of such a marriage seems to be indicated by the story given in the Hadikatu-l-Akálím,‡ and in the variant of that story which I heard from Munshí Gya Dín Tahsildar, a member of a Kanúngo family long settled in Bundelkhand.

* According to the Gazetteer s. v. Orchha, that town was founded by Rudra Partáp or his son in 1531 A. D. One of my genealogies gives the date as 1511 A. D., and the same M. S. dates the expulsion of the Khangárs by Sahanpál in 1313 S. = 1265 A. D., which date is too early. In Chhatarsál's pedigree some genealogies insert the name of Kulnandan between Bhagwant and Champat Rai, and some omit it.

† One genealogy makes Sahanpál to be the son of Arjun Pál, another states that they were brothers, the former ruling at Kurár, and the latter at Mahauní.

‡ Quoted in Beames' Elliot, I, 45.

In his version of the story Pancham Singh is the Gaharwár hero, and becomes servant of the Khangár Rájá Kunðarra, who takes him into favour, but ultimately insults him by asking for his own son the hand of the Rájput's daughter. Pancham pretends to consent to the union, but with the help of two Dhundhera Thákurs, named Punya Pál and Dhundpál, he conceals a plot to murder the Rájá while the latter is intoxicated at a festival.

The plot is executed, and Sápál son of Pancham is installed as Rájá.

The different versions of the story vary so much that no belief can be given to the details of any, but the matrimonial alliance between the Gaharwár and the Khangár is in itself a highly probable incident for those times, and readily explains the low position among Rájputs occupied by the Bundelas.

I cannot suggest any rational derivation of the word Bundela, which is certainly not derived from *bandi* a slave-girl, as Sir H. Elliot was willing to believe.

The following chronological table summarizes the conclusions at which I have arrived concerning the outlines of the history of Mahoba and some other parts of Bundelkhand during the period between the defeat of the Chandels in 1182 A. D. and the rise of the Bundelas.

Chronological Table 1182—1352.

Event.	Date.		Reference.
	Hijri or Samvat.	Date.	
Defeat of Parmál by Prithiraj,	1239 S	1182	Unpublished inscription of Prithiraj. (Cunn.)
Capture of Kálinjar, Kálpí and of Mahoba "capital of the principality of Kálpí," by Kutb-uddín Aibak,	599 H.	1202	Farishta and Táj-ul-Maásir.
Death at Kálinjar of Rájá Parmál Chandel, .....	....	....	Táj-ul-Maásir.
Accession at Kálinjar of Rájá Trailokya Varmma Chandel, .....	....	....	Dahi copper-plate.
Mahoba held successively by Taur Súba, the Mewátis and the Gondas. ....	....	circa 1203 to 1239	Mahoba tradition.
Capture of Gwáliar and defeat of Parihár Rájá by Altamish,	630 H.	1232	Farishta and Táj-ul-Maásir.
Accession at Kálinjar of Sandhira Varmma Chandel,	1291 S.	circa 1234	Conjecture and Dahi copper-plate.
Defeat of Chahada Deva of Garwar,	632 H.	1234	Tabaqát-i-Násiri.

Chronological Table 1182—1352—Continued.

Event.	Date.		Reference.
	Hijri or Samvat.	Date.	
Occupation of Mahoba by a Bhar chief, ..	....	{ circa 1240	Tradition and conjecture.
Occupation of Mauza Bharwára in Panwári by Lodhis during reign of Rája Bhar of Mahoba,	1300 S.	1243	Local tradition.
Occupation of villages on bank of Dasán river by Parihárs from Gwáliar,	1303 S.	1246	Local tradition.
Kírat Pál Rája at Kálinjar,	1309 S.	1252	Mahoba tradition.
Foundation of shrine of Pír Mobárik Sháh at Mahoba, .....	....	....	Ditto.
Defeat of Dalaki-Malaki between Karra and Kálinjar by Ulúgh Khán,	} 645 H.	{ 1248	Farishta and Tabaqát-i-Násiri
Ulúgh Khán 'marches towards' Kálinjar, ..		1251	Tabaqát-i-Násiri.
Rája Sandhira Varmma Chandel makes a grant of land,	1337 S.	1280	Dahi copper-plate.
Rája Kírat Singh Bhar makes at Kálpi a grant of land in Mahoba,	}	{	Copy of <i>sanad</i> belonging to Kanungo of Mahoba.
Rája Bhoja Varmma Chandel, probably at Kálinjar,		1345 S.	1288
Nána Kayath his minister, .....	....	....	Jayadúrga inscription.
Ala-ud-din's expedition against the Hindus of Bhilsa,	692 H.	1293	Farishta.
Defeat of the Bhar Rája of Mahoba by Malik Hasn Shah, .....	....	ditto (?)	Local tradition.
Khangárs of Garh Kurar appointed governors of Mahoba by Dehli court,	}	{ circa 1300	Local tradition.
Conquest of Málwa by Ain-ul-Mulk Multání,		704 H.	1304
Erection of mosque at Bhainsa Darwáza, Mahoba, in reign of Ghiyás-ud-din Tughlak,	722 H.	1322	Inscription on mosque.
Khangárs of Garh Kurar and Mahoba overthrown by a Gaharwár adventurer, founder of Bundela clan,	1400 S.	circa 1340	Tradition.
Malik-us-Shah Nasir-ul-Mulk governor of Mahoba, Karra and Dalamau,	}	{ circa 1352	Tárikh-i-Mobárik Sháhí.

APPENDIX.

The following extracts from the Cawnpore Settlement Report bearing on the later history of the Chandels, and on their connection with the Gaharwárs of Kanauj came to my notice while these sheets were passing through the press. I am not aware of the existence of any other record of a Chandel principality with its capital at Kanauj.

1. The most important tribe in this district is that of the Chandels. I was fortunate enough to obtain two family histories (*Bansáwális*)—one, in Persian, belonging to the now extinct branch of Shiurájpur, the other, in Hindi, to the branch that, settling in Sachendi, covered the south of pargana Jájmau. The former was compiled before the mutiny from documents in his possession by order of the last Rájá, Sati Parshad, who, possibly conceiving he owed but little loyalty to a Government that had stripped him of his large estates, was induced to become a rebel, and though he escaped execution was thrown into prison, and after release died an absolute pauper in the house of Chaube Sidhári Lál, a rising landowner, to whom I am indebted for the loan of the history. The Hindi copy is the compilation of the family bards, and is full of mythical and exaggerated details, but is of value as corroborating the more precise record of the Persian document.

2. It would be foreign to the purpose of this report to relate the earlier history of the Chandels, which, as far as ascertained from these records, was printed in the "Indian Antiquary," February, 1873. I will take up the tale from the migration to Kanauj from Mahoba. On this the Persian manuscript says—"At the time of the Rájá of Kanauj, a Gahrwár, who till this time was rich and prosperous, first from the blows received at the hands of Rái Pithaura, and afterwards from the pressure of Shaháb-ud-din Ghorí, left his home and established himself in Benares. Then Sabhájit by advice of his Wazírs settled in Kanauj." Finding the reputedly rich and wealthy Kanauj open to them, they probably left the sterile Bundelkhund for the fertile Duáb. The year of the migration is given by the Persian manuscripts as *sambat* 1223, by the Hindi one as 1160—a trifling discrepancy.

There were eight Rájás of Kanauj—

Sabhájit.
Gyás Deo.
Ghansyám Deo.
Bihr Deo.
Lahr Deo.
Súp Deo.
Bás Deo.
Khakh Deo.
Dham Deo.

Shiuráj Deo founded Shiuráj-
pur, Rájá. From this
branch descended
the Ráwat of Onhá,
pargana Shiuli.

Pat Deo founded Pachor,
Ráwat. From this
branch descended
the Rána of Sakrej,
pargana Shiuli.

Lag Deo founded Sapahi,
Ráo. From this branch
descended the Ráwat
of Ráwatpur, pargana
Bithúr.

3. From thence a migration was made to Rádhan, where are the remains of a large fort, and thence to Shiurájpur, of which settlement the Persian manuscript gives the following account:—

“Shiuráj Deo founded Shiurájpur and called it after his own name, so that from Kumaun to Karra (Manikpur) the whole country of Kanauj was in his possession. Since the rule of the Muhammadaus had been established now for some time, all the Rájás and great men of the country attended the emperor's court, and amongst them Shiuráj Deo, regarding whom it was ordered that leaving Kanauj” (where he was probably too strong) “he was to reside in Tappa-Rádhan and Bilhat, in the pargana of Bithúr, where is ‘Síta Rasoi.’ Shiuráj accordingly obeying the emperor's order left the fort of Kanauj and, first building a fort in Rádhan, lived there; and afterwards founding Shiurájpur, he established his rule there. While he lived in Kanauj he had soldiers, horse and foot, numerous as the waves of the sea, so that to enumerate them is impossible. They say that when the Rájá went for a short time to Karra, horsemen carried to him the betel-leaf prepared for him daily in his home before the hour of midday meal.”

4. The Gautams (*vide* Elliot's Glossary) are said to have bestowed on the Chandels the 62 villages which afterwards formed the Rájá's taluka under our settlements; but there is no mention of this source of the Chandel dynasty in either manuscript. It is most probable that like other tribes they were encouraged by grants of land from the emperor to expel the turbulent Meos.

5. Of the principal branches of the Chandel clan shown above, the Pachor branch is extinct, and the Sakrej branch practically so. The Onha

(Nonári Bahádurpur) taluka consisted originally of 34 villages, of which ten were held námkár (a sanad of Alamgír bestowing title of Chaudhri of pargana Shiuli confirms this), but the privilege was resumed by Ilmás Ali, who left only ten villages in the possession of the family; these have now, owing to sales for arrears of revenue, dwindled down to six villages, which have only escaped, says Mr. Buck, on account of their lying in a tract of which the greater part of the cultivated area consisting of rice land was not recorded as cultivated in the village papers.

6. The Sapahi taluka consisted originally of 90 villages, of which 48 were separate with the title of Ráwat and formed the Ráwatpur taluka, of which Randhír Singh was the last representative; his estate being now in the hands of the Court of Wards for the benefit of a boy adopted by the widow of his son who died a week after his father. From Ráwatpur one descendant separated his share into the Kákádeo estate, consisting of 23 villages. This is as united a family as there is in the district, and their intelligence has been much sharpened by proximity to the courts. Randhír Singh over-reached himself by his cunning (*v. i.*), but the Kákádeo family have taken stricter precautions to keep the property undivided in the family, though partitions have commenced to disintegrate the once compact property. They fasten their coats on the left side (like Muhammadans), since they were let off some arrears of revenue by the emperor.

7. Of the villages remaining with the original family of Sapahi, 37 have gradually been taken up by other members of the family, two have been given "pún" to Bráhmans, three—Sapahi, Gangroli, and Kíratpur—are the only ones which remain attached to the *gaddi*; and in these even, under the English Government which gives every one his due, the ancestral custom, which retained the whole in the name of the representative of the family, has had to give way before the claims of all the descendants of Híra Singh to their shares calculated *per stirpes*. Hence the revenues of the original seat of the family Sapahi (and Kíratpur) are enjoyed by the cadet branch now represented by Shiudín Singh, those of Gangroli by the sons of the late Ráo Pahlwán Singh, of whom the eldest is a lunatic.

8. The original branches then possessed themselves of the old parganas Shiurájpur, Shiuli, Sakrej, and Bithúr. The branch that settled in Sachendi and overran all the south of pargana Jájmau may be considered but a renegade one. Of its origin the Persian manuscript gives curiously a clearer account than the Hindi manuscript, as follows:—

"They say that Harsingh Deo, son of Karkaj Deo, a brother of Karchand, who lived at Bihari (Pyari), on the bank of the Ganges, had a son, Hindu Singh, very strong and great, but infamous for his oppression of the rayats. At that time Rájá Indarjít hearing of this was grievously

offended. One day that very man, passing through Lachhmanpur Misrán, got up a quarrel with the inhabitants, and began to oppress them greatly. The Bráhmans complained to the Rájá, and set forth all the oppression they had undergone. The Rájá becoming very angry wrote to him, ordering him to leave his home and seek another country, and warned him that to eat and drink in this country was forbidden him: it were better he went elsewhere. He then, with all his belongings, went and settled in Tappa Sapahi (*v. s.*), and became the servant of the Ráo of Sapahi. At that time fortune so favoured Hindú Singh that he rose to great power, and built forts in Behnor and Sachendi, and established his rule over a large tract of country, and engaged thousands of soldiers, horse and foot, and obtained victories in many battles waged against him. His fame was noised abroad, and he assumed the title of Rájá of Sachendi." From the Hindi manuscript, however, of the family history of the Sachendi line, we obtain the following account of the rise of that family, which overran the whole of south Jájmau, and eventually got the territory under the old family temporarily in its grasp:—"The 35th was Gargaj Deo, who had two sons, Karchan Deo, by a concubine, and Har Singh Deo, the sister's son of the Tilok Chand Bais. When Gargaj Deo died, Karchan Deo and Har Singh Deo disputed about the succession, hearing which Tilok Chand came to the Ráni and desired she would give the rāj to Har Singh Deo. She refused and set Karchan Deo upon the *gaddi*. Har Singh Deo left Shiurájpur, came to Behnor and founded Harsinghpur and a second *gaddi*." The truth appears to be more with the latter account, Hindú Singh being a descendant, some generations distant of Har Singh Deo, and living in the reigns of Indarjit and Hindupat (cotemporary of Firoz Sháh), to which Rájás, says the manuscript, "Hindú Singh, in spite of his power, never failed in respect, nor committed so grave an offence as that of his son Sambhar Singh." Hindú Singh's power indeed became so great, and his contumacy so determined, that the reigning emperor got the Bhadauria Rájá to attack him and expel him the country; the great forts of Dinaur, Sachendi, &c. being given over to the Bhadaurias. Sambhar Singh, however, returned eighteen years after and recovered the whole of the lost territory. This same Sambhar Singh rose to such power that he ousted the young Risál Singh (who had to fly the country), and obtained title-deeds to the greater part of the country, and established a "thána in Shiurájpur." With the aid, however, of Nawáb Najaf Khán, Názim of Nawáb Wazír-ul-Mamálik Asf-ud-Daulah, he (Risál Singh) re-established his authority over the whole pargana of Shiurájpur.

9. Sanad of Jalál-ud-din Akbár to Rájá Rámchand. "Since it has been brought to our notice that from time of old, according to immemorial custom, Rs. 15,000 for support, and one 'tinka' per cultivated bigha by

right of seigniority from the villages of pargana Bithur, sirkár Kanauj, by title of zemindári, have been received by my good friend Rámchandra Chandel, and that he is in possession and full enjoyment of that grant and fees; he has petitioned our majesty that an order be passed that the abovementioned grant and fees, by title of zemindári from the village abovementioned, according to former custom, be continued in his possession and enjoyment from rabi, that from year to year, and from harvest to harvest, he may enjoy and possess them; and being a true and loyal servant, may for ever pray for our greatness and prosperity. Be it ordered, therefore, that all officers and servants, Jagir-darân and Crorian, now and for ever, obeying this order, and accepting those rights as free, complete, and fixed, leave them in his possession, nor change nor alter in any respect, nor interfere in any way, nor demand a fresh title."

95 villages.*

Rádhan	...	74 villages.	Bharbedi	...	6 villages.
Bilhat	...	12 "	Havoli	...	18 "
Phalphandi	...	7 "	Barua	...	8 "

10. Sachendi, properly Chachendi, was founded by Cháchak Deo, twelfth in descent from Har Singh Deo and the first to assume the title of Rájá, though not invested with the tilak. His brother Kinnar Singh founded Binaur; a second brother, Garab Deo, settled in Garab (pargana Bithúr); a third, Parasráam in Perajor (pargana Akbarpur). Hindú Singh was sixth in descent from Cháchak Deo; his brother Jográj settled in Binaur, and Hirde Singh in Panki—all three taking the title of Rájá. The Rájás of Sachendi and Binaur joined the rebels, and their estates were confiscated and bestowed on loyal subjects. The Rájá of Panki has kept possession of only half his ancestral estate, and that half is almost hopelessly burthened with debt, but has been put under the charge of the Court of Wards with the hope of freeing it from the grasp of the money-lender.

11. Thus of the once vast possessions of the Chandels, covering nearly four parganas, Shiurájpur, Shiuli, Bithúr, and Jájmau, only 125 villages remain entire (and some of these have been re-purchased) and shares in others.

12. I defer till the fiscal history the account of the fate of the Shiurájpur talúqa.

13. This tribe has its locale in the southern portion of pargana Bilhaur; the account given of their immigration in the southern portion of the pargana is as follows: After the flight of Mánik Chand, younger

* Of the above only Rádhan and Barua are names of villages; the remainder are local definitions of areas now extinct.

brother of Jaichand of Kanauj, Thákur Rahtor (though the family history calls him Gahrwár),* on the victory of Shaháb-ud-din Ghori, and Mánik Chand's own defeat at Karra Mánikpur, his sons made their way to the Vindhya mountains near Mirzapur, whence one son settled in Orcha, and the youngest returned to Aurangpur Sámghi, and ousting the Ujena Thákurs, who were in possession, established a ráj at Sengh, to which were attached 28 villages (seven across the Ganges), and a cadet branch with the title of Ráo at Madára Rái, with 17 other villages. During the oppressions of the Oudh rule the latter branch became extinct, and only 9 villages remained in the hands of the Sengh Rájá. Owing to the lunacy of the Rájá Bhawáni Singh (who was an adopted heir from that branch of the family which had settled across the Ganges), which threw the estate into the power of his two widows (profligate women), even these have been in danger of transfer, but the estate is now in charge of the Court of Wards, and may be saved for the young occupant of the "gaddi," Takht Singh.†

A New Find of Early Muhammadan Coins of Bengal.—By

A. F. RUDOLF HOERNLE, PH. D.

(With four Plates.)

In 1863 an unusually large hoard of silver coins, numbering in all no less than 13,500 pieces, was found in the State of Kooch Behár in Northern Bengal.‡ About 10 years later another, much smaller hoard was found in or near the Fort of Bihár, containing only 37 pieces.§ Both hoards consisted of coins of almost exclusively Bengal mints, only a very

* For an attempted solution of the relation of Gahrwárs to Rahtors I refer to Elliott's Supplementary Glossary. The fanciful derivation given to the name here is "out of house and home" (ghar báhar), referring to the flight of the tribe after the destruction of Kanauj.

† From Mr. F. N. Wright's Report on the Revision of the Settlement of the Cawnpore District, pp. 18—22.

‡ See Report (with list of coins) by Dr. R. Mitra in J. A. S. B. vol. XXXIII, pp. 480—483. Also E. Thomas' *Initial Coinage of Bengal*, in J. A. S. B., vol. XXXVI, p. 1.

§ See Journal A. S. B., vol. XLII, p. 343. The exact date of this find is not mentioned by Mr. Thomas.

small number belonging to the imperial mints of the Dehli Sultáns.* The coins of the large hoard embraced a period of some 107 years, reaching up as high as about A. H. 684 (= A. D. 1236). Those of the smaller hoard extended over a term of 13 years and went back as far as the year 614 A. H. (=1216 A. D.); thus bringing us to an interval of only 14 years from the first occupation of Bengal by the Muhammadans, which took place in 600 A. H. (=A. D. 1203) under Muhammad Bakhtiyár Khaljî.

Selecting the earliest specimens from among the coins of the two finds, Mr. E. Thomas described them in two papers, contributed to this Journal.† The substance of the first paper is also incorporated in his *Chronicles of the Pathán Kings of Dehli*, pp. 109 ff.‡

Quite recently, in the beginning of November 1880, a buried treasure was found by three land cultivators in some kheraj ground within the municipal limits of Gauhati (in Asam). The hoard consisted of 38 silver pieces and 40 small lumps of gold; but only 14 of the former and one of the latter were recovered by the Deputy Commissioner of Kámrúp, who, under the Treasure Trove Act, forwarded them to the Asiatic Society of Bengal. On examination by me they proved to be early Muhammadan coins, some of which bear the name of the provincial mint of Lakhanaúti, while others do not mention their place of mintage at all. Among them were some which have not been hitherto described and published; one or two, I suspect, are altogether new.

They consist of—

- | |
|--|
| 4 coins of the Dehli Emperor Shams-ud-dín Altamsh. |
| 1 coin „ Bengal Sultán Ghiyás-ud-dín 'Iwaz. |
| 2 coins „ Dehli Empress Rizíah or Jalálat-ud-dín. |
| 1 coin „ Dehli Emperor 'Alá-ud-dín Mas'aúd. |
| 3 coins „ Dehli Emperor Násir-ud-dín Maḥmúd. |
| 3 „ „ Bengal Sultán Mughís-ud-dín Yúzbak. |

Before proceeding to describe these coins in detail, it will be useful to give a table of the Governors of Bengal and the contemporary Emperors of Dehli, indicating those rulers (in small italics) coins of whom have been already discovered and described by Mr. Thomas. This will show at a glance the additions (in capital italics), procured from the present find.

* Less than 150 in the large and 1 in the smaller hoard.

† See vol. XXXVI, 1867, pp. 1 ff. and vol. XLII of 1873, pp. 363 ff. The first paper had been originally printed in the *Journal R. A. S. (N. S.)*, vol. II. of 1866, pp. 145 ff.

‡ See also Blochmann's *Geography and History of Bengal*, in *J. A. S. B.*, vol. XLII, pp. 245 ff. Also Dr. B. Mitra in *J. A. S. B.*, vol. XXXIII, pp. 579, 580.

No.	ACCESSION.		Governors of Bengal.	Emperors of Dehli.
	A. H.	A. D.		
1	600	1203	Muhammad Bakhtiyár Khaljî.	Mu'iz-ud-dîn Muhammad bin Sâm.
2	602	1205	'Izz-ud-dîn Muhammad	} Qutb-ud-dîn Aibak.
3	605	1208	'Alâ-ud-dîn 'Alî Mardân,	
4	608	1211	<i>Sultân Ghiyâz-ud-dîn.</i>	
			'Iwaz, ...	} <i>Shams-ud-dîn Altamsh.</i>
5	624	1226	Nâsir-ud-dîn Maḥmūd,...	
6	627	1229	'Alâ-ud-dîn Jânî, ..	
7	627	1229	Saif-ud-dîn Aibak, ..	
8	631	1233	'Izz-ud-dîn Tughril, ...	{ Shams-ud-dîn Altamsh to 633.
				Rukn-uddîn Feroz Shâh to 634.
9	642	1244	Qamar-ud-dîn Timur Khân	{ <i>Sultâna Riṣṣiyah</i> to 637.
				Mu'iz-ud-dîn Bahrân Shâh 639.
10	611	1216	<i>SULTÂN MUGHIS-UD-DÏN YU'ZBAK.</i>	{ <i>'ALÂ-UD-DÏN MAS'AUD SHAH.</i>
11	656	1258	Jalâl-ud-dîn Mas'aúd,...	} <i>Nâsir-ud-dîn Maḥmūd.</i>
12	657	1258	'Izz-ud-dîn Balban, ..	
13	657	1258	Tâj-ud-dîn Arslân Khân,	} <i>Nâsir-ud-dîn Maḥmūd.</i>
14	659	1260	Muhammad Arslân Khân	

I. Coins of Shams ud-dîn Altamsh.

No. 1. (Plate I, No. 1). *Silver*. Weight 164½ grs. Apparently *new* in this variety. It closely resembles Nos. 1 and 3 in Thomas' *Initial Coinage of Bengal*, Pt. II, pp. 350, 353; but the legend on the obverse is differently arranged.

Obv.
 السلطان
 المعظم شمس الد
 نيا والدين ابوالمظفر
 النميش القطبي ناصر
 امير المؤمنين

Rev.
 Horseman
 (with club in right hand).

Margin : illegible.

The marginal legend is complete, but in illegible scrawls, exactly resembling those in No. 3a of Thomas' *Initial Coinage*, Pt. II, p. 353. The date, to judge from other coins of this type, would be some year between 614 and 616. No mint place is mentioned.

No. 2. (Plate I, 2). *Silver*. Like No. 1 in every respect; but the marginal legend is incomplete.

No. 3. (Plate I, 3). *Silver*. Weight 165 grs. Date 6[26]. Exactly like the coin No. XXVIII, described and figured by Mr. Thomas, in his *Chronicles of the Pathān Kings of Dehli*, p. 46, and noted as "very rare."

Obv.
لا اله الا الله
محمد رسول الله

Rev.
في عهد الامام
المستنصر امير
المومنين

Margin: ضرب هذا مائة

Nothing of the margin is left in Mr. Thomas' coin; the small portion (مائة) still visible here clearly belongs to ستمائة *sittamāyat* = 600. Mr. Thomas gives reasons for his conjecture that the date must be 626 A. H. It may be noted that the four segments, formed by the square within the circle, contain, on the obverse, an ornamental scroll, on the reverse, three dots.

No. 4. (Plate I, 4). *Silver*. Weight 167½ grs. Date [6]30. Exactly like the coin, No. XXX, described and figured by Mr. Thomas, *Chronicles*, p. 52. Only one-half of the date is left (30), but it suffices to fix the date as 630. The illegible space of the margin is just sufficient to provide room for the two words ضرب at the beginning and ستمائة at the end. The coin, therefore, bears no name of any mint.

Obv.
السلطان الاعظم
شمس الدنيا والدين
ابو المظفر التمش
السلطان ناصر امير المو
[منين]

Rev.
لا لله الا الله
محمد رسول الله
المستنصر بامر الله
امير المومنين

Margin: هذا السكه في شهور

سنة ثلثين

The syllables منين are contained in the right-hand-side segment.

II. COINS OF GHIYÁS-UD-DÍN 'IWÁZ.

No. 5. (Plate I, 5). *Silver.* Weight 165 grs. *Unique* in this variety. Date : *sixth month of 621.*

The legend on the obverse is much like that on coin No. 7a in Mr. Thomas' *Initial Coinage of Bengal*, Pt. II, p. 357 (J. A. S. B. vol. XLII) ; but the last phrase of that legend is omitted here, and the words are differently arranged. On the reverse, the legend is as on his No. 6a (*ibidem*, p. 356), but with a different date. The letters, especially on the obverse, are excessively badly formed. The two first numerals of the date are very much worn, but sufficient is distinguishable, to determine the date as 621. It cannot be later than 622, as Khalif Násir-ud-dín died in that year ; nor can it be a date in the second decade of the 7th century, because the second numeral is clearly عشرين (not عشر or عشرة), and because the similar coins Nos. 7 and 7a of Thomas are of 620. No mint is named ; but of course it must be some Bengal mint, as Ghiyás-ud-dín was ruler of Bengal.

Obv.

غياث الدنيا والدين
ابو الفتح عوض بن الحسن
قسيم امير المؤمنين سلطان
السلطين معز الدنيا والدين
ابو المظفر علي يد ناصر
امير المؤمنين

Rev.

لا اله الا الله
محمد رسول الله
الناصر لدين الله
امير المؤمنين

Margin : ضرب هذه السكه في جمادى
الآخرة سنة احدى وعشرين وستماية

III. COINS OF JALÁLAT-UD-DÍN (RIZIYAH.)

No. 6. (Plate I, 6). *Silver.* Weight 166 grs. Mint *Laknauti*. Date [634].

This coin agrees in every respect with the coin No. 90 in Thomas' *Chronicles*, p. 107, and No. 2 in his *Initial Coinage*, Pt. I, p. 39. The agreement even extends to the imperfect marginal legend. It is to be noted, however, that in the present coin the word ابنت "daughter" is placed between التمش and السلطان. The date unfortunately was on the lost portion of the margin.*

Obv.

السلطان الاعظم
جلالة الدنيا والدين
ملكة التمش ابنت السلطان
مهرة امير المؤمنين

No margin.

Rev.

في عهد الامام
المستنصر امير
المؤمنين

Margin : ... هذا الفضه بلكنوتى

* The date of this coin is 634, as shown by a duplicate in the Society's Cabinet ; see below No. 24, p. 67.

No. 7. (Plate II, 7). *Silver.* Weight 159 grs. Mint [Laknauti]. Date 635.*

This is a variety of the former (No. 6); the legend on the obverse being in a slightly different arrangement. The word *ابنت* is again distinctly placed between *Altamsh* and *us Sulṭān*. The name of the mint town, omitted in the imperfect marginal legend, should be *Laknauti*.†

Obv.	Rev.
السلطان الأعظم	فى عهد الامام
جلالة الدنيا والدن	المستنصر امير
ملكة الشمس ابنت	المومنين
السلطان صهرة امير	Margin: ضرب هذا الفضة
المومنين	..... خمس ثلثين ستمائة
<i>No margin.</i>	

IV. COIN OF 'ALÁ-UD-DÍN MAS'AUḌ SHÁH.

No. 8. (Plate II, 8). *Silver.* Weight 163 grs. *Unique*.‡

This coin is peculiar in that it has no marginal inscription indicating, as usual, the place of mintage and the dato. Nor does it appear from its present state, that it ever had any marginal circle. The whole face of the coin, on both sides, is covered by a double-lined square area, with four external segments, formed by the circumference of the coin, and containing an ornamental scroll on the obverse, and three dots on the reverse (as on coin No. 3). The inscription on the reverse is peculiar in adding *بالله* *b'illah* to the Khalif's name and *لله* at the end of the whole legend, and on the obverse, in omitting the article *ال* *al* before *سلطان* *sulṭān*. In the peculiarities of its outward arrangement, as well as in those of its inscriptions, this coin is an exact likeness of the coins of Násir-ud-dín, No. 9 and its duplicate. Indeed, as regards the reverse, the two coins, Nos. 8 and 9, are almost duplicates, even as regards the heavy, square form of the letters. On the obverse, the legends are alike, barring only the ruler's name; but while 'Alá-ud-dín's coin, No. 8, shows the same kind of heavy square letters as on the reverse, that of Násir-ud-dín, No. 9, shows the light, oblong kind of letters, which re-appear on his coin, No. 10, and still more strikingly on Mughis-ud-dín's coins (Nos. XI, XII).

* This is now in the possession of the Hon'ble Mr. J. Gibbs, by exchange.

† This is shown by a duplicate of a variety of this coin in the Society's Cabinet; see below No. 26, page 67.

‡ I know only two other specimens which resemble this coin, and which I discovered afterwards, see Nos. 27, 28, page 68. *

Obv.		Rev.
السُّلْطَانُ الْأَعْظَمُ		فِي عَهْدِ الْأَمَامِ
عَلَا الدُّنْيَا وَالْهَيْنِ أَبُو	•	الْمُسْتَعْنَصِرِ بِاللَّهِ أَمِيرِ
الْمُظَفَّرِ مَسْعُودِ شَاهُ		الْمُؤْمِنِينَ لِلَّهِ
بْنِ سُلْطَانِ		
<i>No margin.</i>		<i>No margin.</i>

No place of mintage is named; hence it may be assumed to have been the imperial mint of Dehli. Nor is any date given; but as the Khalif Al Mustanşir died in the middle of 640 A. H., and 'Alá-ud-dín ascended the throne in 639, it would seem to be limited to one of those two years. (See Thomas' *Chronicles*, pp. 120, 122). But see below, p. 64.

The execution of the inscriptions is not good. That on the obverse is so crowded, as to necessitate the inserting of the two words شاه and سلطان, interlinearly, between the second and third lines. Moreover the consonant س is never written, unless it be indicated by an almost imperceptible straight line; thus we have اللطان, لطان, معدود on the obverse and المنتصر on the reverse.

V. COINS OF NÁŞIR-UD-DÍN MAẒMÚD SHÁH.

No. 9. (Plate II, 9). *Silver*. Weight 164 grs. Date [644 ?]

Of this coin, there are two duplicate specimens in the lot,* which are in every respect the counterparts of coin No. 60 in Thomas' *Chronicles*, p. 81, *Initial Coinage*, Pt. I, p. 35 (J. A. S. B., vol. XXXVI) and Pt. II, p. 363 (J. A. S. B., vol. XLII), where it is noted as "unique." According to Mr. Thomas, the margin is "illegible."† But from the present coins it is quite clear, that there is no circular margin at all; the angles of the square areas touch the circumference of the coin, and form with it four segments, containing scrolls on the obverse, and three dots on the reverse. In fact, they are in this respect exact reproductions of 'Alá-ud-dín's coin, No. 8.‡ No mint is named, nor any date. The former is probably Dehli and the latter 644, as will be shown afterwards (see below, p. 64).

* The duplicate is now in Mr. Gibb's possession, by exchange.

† In his last reference, however, (*Initial Coinage*, Pt. II, p. 363) no mention is made of any margin at all.

‡ It is noteworthy that Marsden in his *Oriental Coins* (Pl. XXXV, No. DCXCIV) figures a very similar coin of Náşir-ud-dín, which also is devoid of marginal circles, and indicates no mint or date. But the inscriptions are somewhat different, omitting شاه on the obverse, and reading المستعصم أمير المؤمنين on the reverse. Unless, indeed, the margins should be worn away, as Mr. Thomas (*Chronicles*, p. 126) seems to suppose; but of such wear there appears to be no evidence.

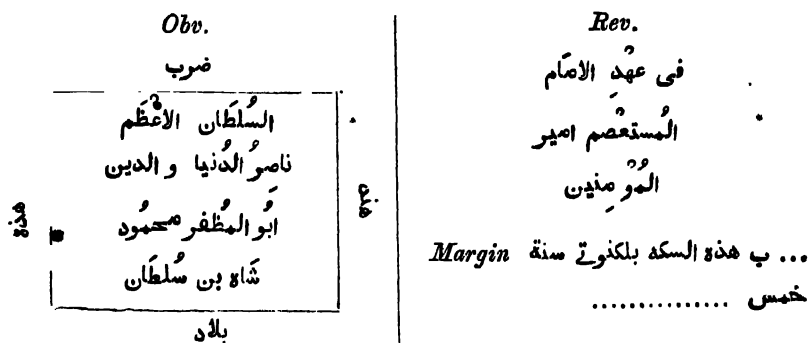
Obv.	Rev.
السلطان الاعظم ناصر الدنيا والدين ابو المظفر محمود شاه بن سلطان	في عهد الامام المستنصر بالله امير المومنين لله
<i>No margin.</i>	<i>No margin.</i>

No. 10. (Plate II, 10). *Silver*. Weight 169 grs. Mint *Laknauti*.
Date [645]. *Unique*.

The obverse of this coin is an almost exact reproduction of the obverse of No. 9, with the exception only, that the four segments contain words instead of scrolls; *viz.*, above ضرب, on the left هذه; below بلاد (?), on the right هند. The reverse differs from that of No. 9 altogether, but, on the other hand, it is apparently an exact reproduction of that of coin No. 110 in Thomas' *Chronicles*, p. 129, with the exception of the date, which is probably 645. The date is almost wholly wanting; there is however room for three numerals, and the traces left of the first numeral best agree with خمس *five*; and considering that this coin shares the peculiarity of the reading *Maḥmūd Shāhu-bnu-Sulṭān* with No. 9, the date in all probability is 645. For in his later coins of 652, 654, 655 Nāṣir-ud-dīn always describes himself as *Maḥmūd-bn-us-Sulṭān*.

It may be noted that the inscription on the obverse of Mr. Thomas' No. 110 is the same as on the obverse of the present coin, with the exception of the omission of شاه after Maḥmūd and the addition of the article ال *al* before سلطان and of a few almost illegible words at the end. Among the latter, however, in the left hand corner, the word يوزبك *yūzbak* is quite distinct, written precisely as in the coins of Mughīṣ-ud-dīn, Nos. 11 and 12. The mention of the name Yūzbak fixes the date of the coin as being during the governorship of Ikhtiyār-ud-dīn, before he assumed independence under the title Sulṭān Mughīṣ-ud-dīn. The coins Nos. 11 and 12 show that he was already independent in 653; hence the date must be either 651 or 652; probably the latter.*

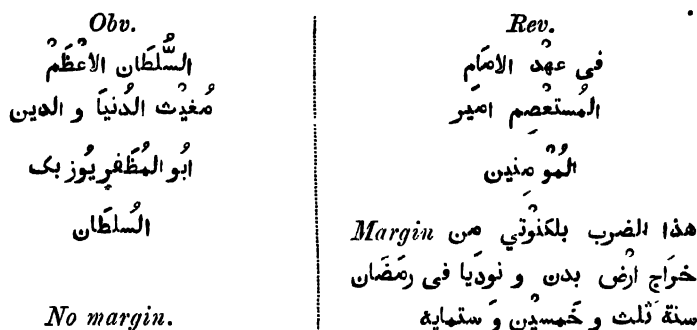
* According to Mr. Thomas' transcript, one numeral is omitted before 5 and one after. The latter, of course, is 6 (= 600); the former must be 1 or 2.—This coin was, at first, thought to be lost, but I found it afterwards in the Society's Cabinet, and it is described below, see No. 29, pp. 68, 69.



VI. COINS OF MUGHÍṢ-UD-DÍN YÚZBAK.*

No. 11. (Plate II, 11). *Silver.* Weight 171 grs. Mint *Laknauti*. Date, month *Ramāzīn* 653 A. H. *New.* This money is said to be derived from the land revenue of *Badan and Nawadiyā†* (Bardwān ? and Nadiyā).

This coin, in the arrangement of the surfaces and in the style of execution of the letters,‡ very closely resembles Násir-ud-dín's coin, No. 10. As regards the obverse, this resemblance is even closer to Násir-ud-dín's coin, No. 9, in one point; *viz.*, in resuming the scroll (instead of the words) in the segments. There can be no doubt, that Mughíṣ-ud-dín, when he made himself independent of Násir-ud-dín, imitated his coins, as nearly as possible.



No. 12. (Plate II, 12). *Silver.* Weight 171 grs. Mint *Laknauti*. Date 653 A. H. Duplicate of No. 11.

* Regarding the history of this ruler, see Major Raverty's translation of the *Tabaqát i Násiri*, pp. 761 ff.

† Spelled *Núdiyāh* in the *Tabaqát i Násiri*. See Blochmann, *Geography and History of Bengal*, in J. A. S. B., Vol. XLII, p. 212.

‡ The coins of Mughíṣ-ud-dín are particularly graceful, with their light, oblong letters and the little ornamental scrolls to fill up the vacant spaces of the square areas

There are two points, especially, on which the coins of this new Find throw light, *viz.*, the dates of Násir-ud-dín and those of Mughís-ud-dín.

1. From a comparison of the dates of these coins, it will be seen that they embrace a period of about 40 years, *i. e.*, from A. H. 614 to 653; *viz.* :

Sultán Altamsh before Ghiyás' revolt,	2 coins,	A. H. 614 or 616.
„ Ghiyás-ud-dín of Bengal,	1 „ „	621.
„ Altamsh after Ghiyás' revolt,	2 „ „	626, 630. *
„ Jalálat-ud-dín (Riziyah),	2 „ „	634, 635.
„ 'Alá-ud-dín,	1 „ „	640.
„ Násir-ud-dín,	3 „ „	644, 645.
„ Mughís-ud-dín of Bengal,	3 „ „	653.

For all practical purposes, these dates are certain, except that of the two undated coins of Násir-ud-dín (No. 9 and its duplicate), which I have put down to the year 644.

There were two brothers of the name of Násir-ud-dín, sons of Sultán Altamsh. The elder was Governor of Bengal for a short time; *viz.*, two years, A. H. 624-626.* The younger, born A. H. 626 (the year of the death of his namesake brother), was Emperor of Dehli, after 'Alá-ud-dín Mas'úd Sháh, for 20 years, A. H. 644-664. During his reign the Bengal Governor Ikhtiyár-ud-dín Tughril Khán revolted and made himself independent under the title of Sultán Mughís-ud-dín.

It is quite certain that the coin No. 10 belongs to the younger Násir-ud-dín. For firstly, the Khalif Musta'sim, mentioned on it, succeeded in A. H. 640, while his predecessor Mustansir was Khalif during the two years of the elder Násir-ud-dín's governorship of Bengal. Secondly, there is the striking resemblance between this coin and those of Sultán Mughís-ud-dín, who was a contemporary of the younger Násir-ud-dín, and who clearly imitated the latter's coins.

The case is very much more doubtful, as regards the other coins of Násir-ud-dín (No. 9 and its duplicate). Mr. Thomas (*Chronicles*, pp. 82, 83, *Initial Coinage*, Pt. II, pp. 360 ff.) considers that the type of coin, to which they belong, must be ascribed to the elder Násir-ud-dín. It is with some diffidence that I venture to differ from so great an authority on Numismatics; but I am inclined to ascribe these coins to the younger. My reasons are the following :

• In the first place, the present coins clearly show that the Bengal Governors never struck coins in their own name, except when they had revolted and established an independent Saltánat. Thus all the present coins bear the names of Dehli Emperors, except those of Ghiyás-ud-dín and

* See Major Raverty's Translation of the *Tabaqát i Násiri*, pp. 594, 629 ff. Also E. Thomas, *Initial Coinage*, Pt. II, p. 35, Pt. II, p. 350, *Chronicles*, p. 82.

Mughīṣ-ud-dīn, who, for a certain time, had made themselves independent. During that time, they replaced the Emperor's name with their own; but while they were mere Governors, they did not venture to interfere with the Emperor's superscription. Thus Ghiyāṣ-ud-dīn's name does not appear on the coins before or after his revolt, but that of the Sultān Altamsh. Similarly Mughīṣ-ud-dīn's name does not appear on No. 10, which was struck before his revolt, but Nāṣir-ud-dīn's. The utmost a Governor might venture to do was to place his own name as an appendix to that of his Emperor; as shown in No. 110 in *Chronicles*, p. 129, where Ikhtiyār-ud-dīn Yūzbak (*i. e.*, Mughīṣ-ud-dīn) adds his name after that of his Emperor Nāṣir-ud-dīn; in this case, indeed, there was a special reason for it; for, as the date of the coin shows, Yūzbak was at that time already on the eve of his revolt (see below, page 65) and the conjunction of his own name with that of the Emperor was the first step towards it. Again though 'Izz-ud-dīn Ṭughril was the Governor of Bengal during the time when a woman, Riṣiyah, sat on the imperial throne, yet his name does not appear on the contemporary coins, but that of the Empress Jalālat-ud-dīn. It is clear, therefore, that the coins, which were struck during the Bengal Governorship of the elder Nāṣir-ud-dīn, could not have borne the latter's name, but that of his father Altamsh, who was the Emperor of that time.

But in addition to this inferential proof, there is direct evidence of the fact. Mr. Thomas, *Initial Coinage*, Pt. II, pp. 360-361 (Plate X, Nos. 7 and 8) describes and figures two coins, struck at Laknauti,* in the year 624, that is, in the year when the elder Nāṣir-ud-dīn was already Governor of Bengal; but both coins do not bear his name, but, as usual, that of the contemporary Emperor Altamsh. It is clear, therefore, that the Nāṣir-ud-dīn, who describes himself as "Sultān" and puts his name on the coins under discussion, cannot have been a mere Governor of Bengal, but must have been an Emperor of Dehli. Whence it follows, that he must be the younger Nāṣir-ud-dīn; for he alone of the two namesakes ever was Emperor.

In the second place, when describing the coins, I have shown (see p. 59) that Nāṣir-ud-dīn's coin, No. 9, is a close imitation (barring the ruler's name, of course) of 'Alā-ud-dīn's coin, No. 8, and also (through No. 10) a more or less close prototype of Mughīṣ-ud-dīn's coins, Nos. 11 and 12. This fact accurately fixes Nāṣir-ud-dīn's position between 'Alā-ud-dīn and Mughīṣ-ud-dīn (that is, between 644 and 653) and proves him to be the Emperor of that name, but not the Governor of Bengal of that name, who died 18 years previously (626). Moreover, it should be remembered, that 'Alā-ud-dīn's coin No. 8 and its antitype, Nāṣir-ud-dīn's No. 9, have some points quite peculiar to themselves; thus, the absence of any indication of

* The imperfect word, in No. 7 on Pl. X, which Mr. Thomas reads as شهر, is probably بلکنوتی and the preceding lacuna is السکه.

mint-place and date, the omission of the article before Sultán, the addition of *illah*.* Now it is extremely improbable, that the Emperor 'Alá-ud-dín should appropriate, for one type of his coins, not only the general style, but also the peculiarities of a coin of a mere Governor of Bengal, and that, of a Governor who had died 13 years previously (for Násir-ud-dín, the Governor, died A. H. 626, while 'Alá-ud-dín became Emperor in 639). On the other hand, it is perfectly natural that the Emperor Násir-ud-dín should (temporarily) appropriate the style and peculiarities of the coins of his immediate predecessor 'Alá-ud-dín, whom he succeeded in 644. He probably very soon discarded the imitation. His coins, No. 10 of A. H. 645 (in the present lot), and No. 110 of 651, No. 106 of 654 (in *Chronicles*, pp. 127, 129) already show different styles, without the peculiarities of 'Alá-ud-dín's coin. We shall probably not go far wrong, if we assume that his coins of the style No. 9 belong to the very commencement of his reign and are to be ascribed to A. H. 644. This is further made probable by the fact that coin No. 9 shows an anachronism in preserving the name of the Khalif Al Mustangir b'illah, who had already died in 640. This would seem to show that 'Alá-ud-dín's coin was adopted by Násir-ud-dín in some haste, merely changing the imperial names, but leaving all the rest undisturbed; but as soon as his affairs had become settled, the needful change must have been made,† as shown, *e. g.*, in the very similar coins, noticed by Marsden, *Oriental Coins*, p. 523 (Plate XXV, No. DCXLIV). 'Alá-ud-dín's coin would lend itself all the more easily to this anachronism, since no date is mentioned on it. Indeed, judging from its peculiarities, I am inclined to think that the omission of the date was intentional, so as to allow of its being struck continuously throughout the reign of 'Alá-ud-dín, up to 644, when Násir-ud-dín succeeded him. Which again would account for the fact of its being adopted so easily by the latter emperor. That it, however, was only adopted by him as a very temporary measure, is shown by his coin, No. 10, which (see page 60) in all probability was already struck in 645, and which preserves the reverse of his (temporary) coin, No. 9, but exchanges the anachronical name of Mustansir, for the correct Musta'sim.

In the third place, most of the arguments, which Mr. Thomas adduces for his belief that the coin belongs to the elder Násir-ud-dín, are taken

* Also the addition of *b'illah*; though this occurs also on a few coins of Altamah; *e. g.*, No. XXX, in *Chronicles*, p. 63.

† There still remains some difficulty about this anachronism. For 'Alá-ud-dín himself changed the Khalif's name on his coins, from 641, see *Chronicles*, p. 122. And it seems strange, why Násir-ud-dín, when he wanted to imitate 'Alá-ud-dín's coins, did not make a more appropriate selection. But the peculiarities of the coin, and the ease of its adoption on account of the omission of any date, may have influenced him.

from its peculiarities, which, he considers, point to an early period (see *Chronicles*, pp. 82-84). Much of the force of these arguments disappears, when it can be shown, from the present Find, that all those peculiarities occur in a coin of 'Alá-ud-dín, that is, at a date quite as late as the younger Násir-ud-dín. With regard to the peculiar phrase *bnū-Sulṭán* (*Chronicles*, p. 84), the case is even stronger; for the present Find shows, that it also occurs in No. 10, which is an undoubted coin of the younger Násir-ud-dín. Whence it is clear, that its occurrence in No. 9 in no way tends to prove that the latter is to be ascribed to the elder brother of that name.

In the fourth place, the omission of any mention of a place of mintage appears to me to point to Dehli as its mint-place. For no one would think of the provincial mint of Lakhanautí, unless that place were specially indicated. But if the coin was struck at Dehli, it could not have proceeded from the elder Násir-ud-dín, who, if he coined at all any coins in his own name, must have done so in Lakhanautí, the capital of his Bengal governorship.

2. Regarding Sulṭán Mughís-ud-dín, it has been already mentioned that he made himself independent under that title during the long reign of the Emperor of Dehli, Násir-ud-dín. His history is narrated at length in the *Ṭabaqát-i-Násirí*, where however, unfortunately, no dates are given, and the exact period of his independence has not been known hitherto (see H. Blochmann, *Geography and History of Bengal*, in J. A. S. B., vol. XLII, p. 246). The coins, now discovered, however, help to clear up this obscurity. They show that in 653 he was already independent. Further the coin of Násir-ud-dín, No. 110, in Thomas' *Chronicles*, p. 129, bearing the joint name of Ikhtiyár-ud-dín Yúzbak (as Mughís-ud-dín was called before he made himself independent), which is dated either 651 or 652, shows that his independency cannot have commenced earlier than either of those two years, more probably towards the end of 652. Lastly there is a coin of Násir-ud-dín in the Society's Cabinet,* which was struck at Lakhanautí and bears date the second month of the year 655, and which shows therefore that at that time Mughís-ud-dín's independence must have been ended and the Dehli Emperor's sovereignty again acknowledged. According to the *Ṭabaqát-i-Násirí*, Mughís-ud-dín lost his life in an unsuccessful war with the Rái of Kámruḍ. This probably happened at the commencement of the year 655† and led to the re-establishment of

* See No. 30 in the Supplement, page 69.

† The second month or Šafar of the year 655 A. H. corresponds, as far as I can make out, to July of 1256 A. D. In the *Ṭabaqát i Násirí* (pp. 765, 766) it is stated that Mughís-ud-dín was wounded and died not long after the *spring harvest*. This brings us towards the middle of the year (1256 A. D.) according to our reckoning, the spring harvest being in March or April.

66 A. F. R. Hoernle—*A New Find of Early Muhammadan Coins*. [No. 1, the Debli supremacy. Altogether Mughis-ud-din's independent Saltanat cannot have lasted much longer than two years (653 and 654).

SUPPLEMENT.

Since writing the foregoing account, I had occasion to examine the Muhammadan coins in the Society's cabinet, in conjunction with the Hon'ble Mr. J. Gibbs; C. S. Distributed in various bundles and mixed up with Pathán and Moghul coins, we found a small number of coins of the early Bengal series. These I afterwards examined with the following result. It will be seen that there are among them a few pieces of considerable interest.

There were 8 coins of Shams-ud-din Altamsh.

- 3 „ of Ghiyás-ud-din 'Iwaz.
- 3 „ of Jalálat-ud-din (Riziyah).
- 2 „ of 'Alá-ud-din Mas'aúd Sháh.
- 5 „ of Násir-ud-din Maḥmúd Sháh.
- 2 „ of Mughis-ud-din Yúzbak.

I. COINS OF SHAMS-UD-DÍN ALTAMSH.

No. 13. *Silver*. Weight 148 grs. A duplicate of No. 3; but margin altogether illegible.

No. 14. *Silver*. A duplicate of No. 4; now in the possession of Mr. Gibbs, by exchange.

No. 15. *Silver*. Weight 164½ grs. A variety of Nos. 4 and 14. Margin partially legible شهر سنة ثلثين وستمائة ضرب. Date 630. The variety consists merely in the slightly different formation of the letters.

No. 16. *Silver*. Weight 151½ grs. Like Nos. 4 and 14 in everything but the date, which is 632. The margin is almost complete شهر سنة اثنا وثلثين وستمائة.

No. 17. *Silver*. Weight 148½ grs. Apparently a badly preserved duplicate of No. 16.

No. 18. (Plate III, No. 1). *Silver*. Weight 161 grs. Belongs to type No. XXXI in Thomas' *Chronicles*, p. 53. But in the present coin both marginal readings are not identical. According to that on the reverse, this money is derived from the land-revenue of Kanauj and some other place the name of which I cannot read.

Obv. ضرب هذا الفضة في بلاد الهند حضرت
Rev. خرج قنوج و ?

No. 19. *Silver*. Weight 165 grs. (Plate III, 2). *Unique*. It belongs to type Nos. 4, 14, 16 (or No. XXX in Thomas' *Chronicles*, p. 52), which it resembles in every respect, except that it names *Laknauti* as its place of

mintage. As far as I know, this is the only coin of Shams-ud-dín hitherto known (or at least, made known), which expressly bears the mint name of Lakhanautí. Margin complete : ضرب هذا السكة بلكنوت في شهر سنة ثلث ثلثين وستمائة. It is dated A. H. 638.

No. 20. *Silver.* Weight 156½ grs. Apparently a duplicate of No. 9 in Thomas' *Initial Coinage of Bengal*, Pt. II, p. 359 (in J. A. S. B. vol. XLII). The margin, however, is almost illegible. The place of mintage is not mentioned, but it must have been Lakhanautí in Bengal, as it follows the type of Ghiyás-ud-dín's coins (see below).

II. COINS OF GHIYÁS-UD-DÍN 'IWAZ.

No. 21. *Silver.* Weight 161 grs. Duplicate of No. 4 in Thomas' *Initial Coinage*, Pt. II, p. 354.

No. 22. (Plate III, 3). *Silver.* Weight 160½ grs. Resembles No. 5 in Thomas' *Initial Coinage*, Pt. II, p. 356, in every thing but the marginal legend which reads differently and gives a different date, A. 616.

Margin : السكة شهر؟ سنة ستة عشرة ؟

No. 23. *Silver.* Weight 157 grs. Duplicate of No. 6a in Thomas' *Initial Coinage*, Pt. II, p. 356. But the margin is not quite complete.

ضرب السكة في ربيع الآخر سنة سبع عشرة و

III. COINS OF JALÁLAT-UD-DÍN (RIZIYAH).

* No 24. (Plate III, 4). *Silver.* Weight 162 grs. This is a duplicate of No. 6. But fortunately in the present coin that portion of the margin, which contains the date 634, is complete, while the other portion containing the mint-name is wanting.

Margin : ضرب هذا شهر سنة اربع ثلثين وستمائة

No. 25. (Plate, III, 5). *Silver.* Weight 159 grs. This is a variety of No. 7, which it resembles in every respect, except that the word بنت is not placed between السلطان and النمش but, interlinearly, above them. A duplicate of this coin is described and figured by Mr. Thomas in his *Chronicles*, p. 107 (Pl. I, 27 and Pl. VI, 1). The margin, unfortunately, is incomplete ; it gives the date distinctly, but the mint, which no doubt was Lakhanautí, is omitted.

Margin : ضرب هذا شهر سنة خمس ثلثين وستمائة

No. 26. *Silver.* Weight 146 grs. A very badly preserved duplicate of No. 25. Of the marginal legend only الفضه بلكنوت remains ; thus fixing Lakhanautí as its place of mintage.

IV. COINS OF 'ALÁ-UD-DÍN MAS'ÁÚD SHÁH.

No. 27. (Plate III, 6). *Silver*. Weight 142 grs. Apparently *unique*. This coin shows the same inscriptions as No. 8, with all its peculiarities; viz., on the reverse, the addition of *b'illah* after *Al Mustanẓir* and *Allah* after *Al Mominín*; and on the obverse, the omission of the article *us* (ال) before *sulṭán*. It differs from No. 8, however, by the possession of a margin with inscriptions on both sides, of which illegible traces are still distinguishable. The original presence of margins is also evidenced by the fact of the size of the square areas being much smaller than in No. 8. The letters, also, are much more neatly formed on the present coin, than on No. 8. As a further minor difference it may be noted, that the segments on the reverse of the present coin show the usual four dots arranged two on each side of a small loop, while on No. 8 the loop is absent. There are traces of a word, in the left hand corner, below بالله, which I cannot quite make out. They look like حمد *hamd* "praise", or perhaps خلد. And it may be noted that on No. 8 there are also traces of a word in the same place.

Obv.

السلطان الاعظم
علا الدنيا والدين ابو
المظفر مسعود شاه
بن سلطان

Margin : illegible.

Rev.

في عهد الامام
المستنصر بالله امير
المومنين لله

Margin : illegible.

No. 28. (Plate IV, 1). *Silver*. Weight 145 grs. Apparently *unique*. This coin agrees with Nos. 27 and 8 in omitting the article *us* (ال) before *sulṭán* on the obverse.* For the rest, the legends are the usual ones, as on No. 97 in Thomas' *Chronicles*, p. 122; that is, بالله and لله, on the reverse, are omitted. It is not quite clear, whether there were originally any margins with legends; there are no apparent traces left.

I may, here, add that there are several coins of the usual type (like Nos. 97, 98 in Thomas' *Chronicles*, p. 122) in the Society's Cabinet.

V. COINS OF NAẒIR-UD-DÍN MAẒMÚD SHÁH.

No. 29. (Plate IV, 2). *Silver*. Weight 140½ grs. *Unique*. This is the coin which Mr. Thomas has described and figured in his *Chronicles*, p. 129, No. 110. I have thought it desirable to re-figure it, as Mr.

* Unless the scrawl over the س of *sulṭán* should be meant for ال.

Thomas has only given the obverse, which does not contain the marginal legend with the date, and because the facsimile of the obverse given by him is not quite exact. As I have already mentioned on p. 60, the name *Yūzbak* is distinctly recognizable in the lower left-hand-corner. The ~~word~~ just preceding the name I read doubtfully المعين *Al Mu'ain* "the appointed one" or "the assistant"; the letters مع *mīm* with the *pesh* over it and the following 'ain are quite distinct. Below this word, again, there are traces visible of خان *Khān* or سلطان *Sulṭān*, perhaps of *Tughril Khān*, a name of the *Yūzbak*.

No. 30. (Plate IV, 3). *Silver*. Weight 169 grs. *Unique*. In general, style of execution this coin very closely resembles No. 10; but it omits *Shāh* after *Maḥmūd* and adds the article *al* to *Sulṭān*. The date in the margin is: Month *Ṣafar* in A. H. 655, which is noteworthy, as fixing the termination of the independent *Salṭanat* of *Mughīṣ-ud-dīn*.

Obv.
السلطان الاعظم
ناصر الدنيا والدين
ابو المظفر محمود
ابن السلطان

Rev.
في عهد الامام
المعتصم امير
المومنين
Margin: ضرب هذا السكة
بلكهنؤ في صفر سنة خمس
خمسین وستمائة

No. 31. *Silver*. Weight 169 grs. Belongs to type No. 106 of Thomas' *Chronicles*, p. 127, to which it is like in every respect, excepting the date which is 655.

No. 32. *Silver*. Weight 162 grs. A variety of the same type as No. 31, but the square areas are larger and the letters of a coarser make, closely resembling No. DCXIV in Marsden's *Oriental Coins*. Both margins are almost altogether worn away.


No. 33. (Plate IV, 4). *Silver*. Weight 167 grs. A variety of the same type as No. 32. On the obverse a small portion of the margin is left: بحضرت دهلي ..., naming *Dehli* as the place of mintage.

V. COINS OF MUGHĪṢ-UD-DĪN YŪZBAK.

No. 34. (Plate IV, 5). *Silver*. Weight 168 grs. Triplicate of Nos. 11 and 12; the best preserved among them.

No. 35. (Plate IV, 6). *Silver*. Weight 145½ grs. Variety of Nos. 11, 12, 34. The letters on the reverse are not quite so well formed, especially in the margin, where, *e. g.*, مل (ثمل) stands for ثلث.

While examining these coins I have been led to make two observations which I should like to mention.

1. As to the place of mintage. In the case of Shams-ud-dín's coins of the horseman type no mint-place is mentioned (unless indeed it be contained in one of the illegible scrawls). Mr. Thomas ascribes the  of this type to a Bengal mint (see *Initial Coinage*, Pt. II, p. 352), on two grounds: *first*, because these coins have been found in conjunction with others which are undoubtedly of Bengal mintage; and *secondly*, because a unique gold coin of this type actually bears the mint name "Gaur" on its reverse (ضرب بكور).* Neither reasons, however, appear to be quite conclusive. As to the former, coins of undoubtedly Delhi mintage also have been found in conjunction with them; e. g., Nos. 3 and 4† coins of which type Mr. Thomas himself ascribes to Delhi. Then *secondly*, though the reading *Zarb ba Gaur* (not *Zarb Nagor*) is most probably the true one, it only proves that particular (unique) gold coin to be Bengal-struck; it may be an exception; it does not show that the silver coins of the same type were also struck in Bengal. It is certain from coins of other types, that Shams-ud-dín struck coins of the same type, both at Delhi and at Lakhanauti; and it is to be observed that those struck at Delhi bear no mint name, while those struck at Lakhanauti bear that name. Thus the coins, Nos. 4 and 19, are of exactly the same type; but No. 4, which does not name any mint, is admittedly of Delhi, while No. 19 is of Lakhanauti, because it expressly names that mint. Speaking generally, it seems but reasonable that in the case of coins of Delhi Emperors, when no mint is named, it should be the Imperial mint of Delhi. In their case no one would think of another mint, but the Imperial one, unless it were expressly mentioned that they were struck at a provincial mint (Gaur or Lakhanauti). On the same principle (though the result is different), in the case of the coins of the Bengal Sultan Ghiyás-ud-dín 'Iwaz which name no mint, the latter must be a Bengal mint (Gaur or Lakhanauti); because Ghiyás-ud-dín being merely the ruler of Bengal, no one could think of any other but the principal Bengal Mint. Accordingly I incline to the opinion, that all coins of Shams-ud-dín of the Horseman type, which bear no mint name, are to be ascribed to Delhi;† and further, generally, that all coins of Delhi Emperors, without any mint name, must be thus ascribed. Major Raverty, in his Translation of the *Tabaqát-i-Násiri*, p. 772, while questioning Mr. Thomas' ascription of these coins to Bengal mints, thinks they may have been struck in Bihár, on the occasion

* Maulvi Abdul Hai of the Madrasah, however, informs me that the correct Muhammadan spelling of this name is *Ghaur* غور.

† Their connection with Shams-ud-dín's Delhi copper coins of the Horseman type (*Chronicles*, p. 71) is obvious.

when Shams-ud-dín "sent forces from Dehli towards Lakhnautí, possessed himself of Bihár, and installed his own Amír therein." But there is really no evidence of the existence of a Bihár mint at this time; but the passage quoted from the Muhammadan historian may show how it came to pass that some of Shams-ud-dín's coins, struck at Dehli, were carried thence to Lakhanautí.

The second observation refers to the style of the letters. Three different styles can be clearly distinguished: a rude and ill-formed, an ordinary square and an ornamental oblong. The first style may be best seen in Nos. 1 and 5; the second in Nos. 4, 29, the third in Nos. 3, 11. The rude form is peculiar to the early Bengal coins of Ghiyás-ud-dín 'Iwaz and to Shams-ud-dín's coins of the horseman type. The ornamental oblong is seen in all Bengal coins of Mughís-ud-dín. The imperial coins show both the ordinary square and the ornamental oblong style, more or less distinctly; thus compare Nos. 3 and 4 of Shams-ud-dín and Nos. 10 and 29 of Násir-ud-dín. Whether any and what conclusions may be drawn from these facts regarding the mints from which they may have been issued, I must leave others to decide, who understand more of Indian Numismatics than I do.

On the Coins of the Sikhs.—By CHAS. J. RODGERS.

The power and rule of the Sikhs have passed away. The year which witnessed the total destruction of the Sikh army at Gujrát, witnessed also the annexation of the Panjab to British India. Since 1849 the Sikhs have been nothing more than what they were before the time of Gobind Singh, a religious sect. All signs of their political influence and superiority are fast passing away from the country. When the present generation has passed away, there will be little in the Panjab to show that the Sikhs were once rulers. Even now it is forty years since the death of Ranjít Singh, and it is only here and there one meets a Musalmán zamindár who tells us of what he suffered from Sikh extortion and oppression. And it is only now and then one meets with a grey beard who glories in the memories of the raids of the Sikh soldiery.

The history of the Sikhs from the time of Nának to the battle of Gujrát is one of the most interesting and instructive studies in the whole range of modern revolutions. It shows how religiousness and quaintness, combined with self-denial and an open house can carry the day against all established customs and national prejudices. It shows how a little truth combined with shrewdness and eccentricity, audacity and assertion, bold and long continued, can at last prevail over all objections. By religiousness I

do not mean real godliness, I only mean the performance of those actions which are accounted religious by the people amongst whom they were performed. There was very little in the characters of some of the Sikh religious leaders to mark them as teachers of religion. Their lives were loose, as were their doctrines. We read constantly of faith and of saving ~~Sikhs~~ in Sikh books. But it resolves itself into faith in the Guru who claimed for himself perfect infallibility, if not perfect equality with god. The commandments of Sikhism have to do with wearing long hair, abstinence from cow's flesh and Muhammadan women and smoking and drink. They encourage bloodshed, hatred, malice and all uncharitableness wherever and whenever Muhammadans are concerned. The modern Sikhs are, however, a temporizing lot of people, and they find our rule too obliging to their superstition. Their zeal and energy are not employed against the English but against Sikh declension from ancient ritual and discipline. The Kookas were Sikh Wahabecs or Wesleyans, and so are the Nirmalas.

As this paper has to do with the *coins* of the Sikhs, the symbols of their temporary power, it may be as well, although it is an oft told story, to give here a short account of the rise of the Sikhs, and to show how they became changed from a religious sect into a ruling power.

1. *Nának* the founder of the Sikhs was born in 1469 A. D. at Talwandí near Lahore. This was in the time of Bahlol Lodi. His father was a Khatri. He early became a recluse and joined himself with a Musalmán musician named Mardáná. He afterwards wandered about like a modern faqir. In these journeys he must have got some ideas about Muhammadanism and Hinduism beyond what his native village could have given him. Nának died at Kartárpur in 1538, in the 7th year of the reign of Humáyún. There is no trustworthy account of his life. He seems to have been as friendly to Musalmáns as to Hindús. At his death one party wished to bury him and the other to cremate him. His doctrine was that there was one God. But with this he mixed much of polytheistic Hinduism and more of mysticism. At the same time he took good care to insist on his own guruship and on the necessity of giving alms to him as guru. To his followers he promised participation in all that was given to him. He made disciples from both Muhammadans and Hindús. Before his death he appointed a Hindú, named Angad, his successor. Nának's disciples (Sikhs) were an ignorant rabble, few of them knowing how either to read or write. They were his servants and followed him for what they obtained as alms or in the shape of food.

2. *Angad*, the second guru, did not rise above his fellow Sikhs in scholarship. His influence on his sect was *nil*. He simply figures as a man named a guru. He died in 1552 A. D., having made his servant Amar Dás his successor, to the exclusion of his sons, as Nának had done

before him. In all this we can trace the influence of Muhammad's Khali-fahs who acted at first similarly.

3. *Amar Dás* was a Khatri. He lived at Gobindwál. He, though unable to read and write, composed some verses which are inserted in the sacred writings of the Sikhs—the *Granth*. He died in 1574 A. D., having nominated his son-in-law *Rám Dáss* his successor.

4. *Rám Dáss* was an inhabitant of *Chak* or Umritsur, or rather he settled there after his marriage, and the place was afterwards known as Guruciak. About this word *Chak*, we may notice that the "principality of Cheka, the ancient Sákalo, stretched from the Beas on the east to the Indus on the west, and from the foot of the Rájáori hills to the confluence of the Panjab rivers.* "It therefore comprised all the plains of the Panjáb. The Cheka of A. D. 650 had in fact the same limits as the kingdom of Lahore in A. D. 1650."† Cheka would seem to be the country inhabited by the Sákas or Indo-Scythians. In the late trip of His Honor the Lieutenant-Governor of the Panjáb to Kulu, Thákur Hari Chánd of Lahoul presented him with three Kanerki coins and a medallion, saying, that these coins belonged to "the dynasty of the Sák-po kings which existed very long ago." But the word *chak* means also the wood placed under the brick work in a well. This, however, would not apply to Umritsur as here was a fountain and not a well. Hence we may regard *Chak* as being a remnant of the old *Cheka* or *Sákala* of the Scythians.

Rám Dáss prospered as a guru. He seems to have had a literary turn. As he collected alms, he dug out the tank from which Umritsur takes its name. But he did not build it, that is, as we say in India, he did not make the tank *pukka*. For in his successor's time the tank was overgrown with weeds. He died in 1581 A. D. The tank was dug out in 1578 A. D. It was *outside* the city walls. Dr. Trumpp says the city grew *round it*. This was the case afterwards, but not in the time of *Rám Dáss*. There is still visible in the city an old gate called the Darshaní Darwáza. This was the gate by which worshippers were wont to leave the city, when they were going to visit (*darshan kurní*) the temple. There are several other gateways still visible, and the walls can be traced. The present city is many times larger than what was called *Rámdáspúr*. At present it is the custom to dig tanks *outside* cities, not inside. There were several tanks outside *Rámdáspúr*. These formed into *dábs* afterwards in some cases. They have now been filled in and will be converted into intra-mural parks or gardens. There were other tanks also outside the city which are now tanks inside, such as the Santokhsar, *Rám Sar* and Viveksar. *Sar* is Persian for a foun-

* J. A. S. B., p. 693, for 1854.

† *Ibid.* footnote on same page.

tain or head of a river.* *Amrit* is the water of *immortality*. But the Sikhs of the present century spell the word with a *b* and call it *Ambratsar*. On the Gurmukhí coins it is thus spelt. On the lamp shades in the railway station I notice the word is printed probably by an Amritsar[†] man امريت سر. The *b* is very plain. Some etymologists (Sikhs never were troubled with learning) derive the name from *Ambar* (عنبر) = ambergris, or a rich perfume. Amritsar is certainly a place of strong smells, but by no means pleasant.

5. Rám Dáss was succeeded by his son *Arjan*. And from this time the guruship became hereditary. Arjan built the tank and temple, but not those which exist now. The present structure is a more modern building. He began it in 1588 A. D., the year of the Spanish Armada. Tradition says that there was a grand procession formed, that portions of Nának's sayings were recited, and that the guru laid the first stone. But the brick-layer did not consider it laid properly, so he took it up again and relaid it. Arjan then prophesied that the building he was commencing should be one day destroyed and again rebuilt. But Arjan did more than build the temple. He collected the saying and verses of Nának and others, and wrote them in Gurmukhí letters in a book which is called the *Granth*. This book therefore represents to a certain extent the moral maxims of the teachers who had existed before Arjan's days in the Panjáb. It being in the language of the people, has always exercised much power over them. It was *the* book in the mother-tongue of thousands of unlettered men and women. No wonder they revered it. It is now called the *Granth Sáhíb*, and the temple is called the *Durbár Sáhíb*: while Amritsar, the city which contains the two, is spoken of as *Srí Amritsar*. It is more revered now than either understood or practised. Its language, being three centuries old, is not intelligible now to the masses. Many changes have come over the people in those three hundred years of Mogul rule and rise of British power.

Arjan was enabled by his followers' gifts to maintain some kind of state. He made arrangements for his income being collected with regularity. But Amritsar lay in the road between Dehli and Lahore, and Arjan unfortunately brought himself to notice by leaning favourably towards the rebellious son of Jahángír. That rebellion was wiped out with one of the most bloody acts the history of India records. 700 men were impaled and poor Khusrau was led between the rows to be regaled with the groans and shrieks of the victims. Arjan escaped this horrible death. But for all

* [Or rather, *sar* is the Sanskrit *saras* "pool, tank," which in the modern Indian languages becomes *sar*. *Santokh-sar* or *santosh-saras* is the "tank of contentment;" *Rám-sar* "the tank of Rám," *Vivek-sar* "the tank of discrimination." Ed.]

that, he was killed at Lahore in 1606 A. D., one year after the gunpowder plot. His dabbling in politics was not a success.

6. *Har Govind* was his successor. He was a man with a military turn. But as there was an established government, his movements must have resembled those of a freebooter or an insurgent. He built *Srī Hargovindpūr* on the river *Beas* to serve as a place to flee unto when any actions of his made flight a necessity. Joining the regular army, he rendered himself obnoxious by appropriating the pay of the soldiers. He was imprisoned many years for this. He afterwards entered the service of *Sháh Jahán*. But his old propensities broke out afresh, and he left it and became once more a freebooter. *Rámdáspūr* was taken by *Sháh Jahán's* troops, but in an encounter with *Har Govind* at *Kartárpur* they were defeated. After this, however, *Har Govind* was compelled to take refuge in the hills where he died, 1638 A. D., in the house of a robber with whom his son had been residing.

7. *Har Rái* succeeded his grandfather *Har Govind*. He joined *Dará Shikoh*, the unfortunate brother of *Aurangzeb*, against that astute and wily monarch. When *Dará* was beaten, the result was not favourable to *Har Rái*. He died in 1660 A. D., having done nothing worthy of notice.

8. *Har Kisan* succeeded *Har Rái* his father. He died in 1664 A. D., having accomplished nothing.

9. *Tegh Bahádúr*, third son of *Har Govind*, next became *Guru*. He took up his residence at *Anandpūr*, but as a rule led a roving life like a common *faqír*. In one of these excursions he was imprisoned at *Dehli*. But it turns out that this excursion was a predatory one, and as a consequence he was not only imprisoned, but executed A. D. 1675.

10. *Govind Singh* his son succeeded him, although only 15 years old. He knew some Persian and *Hindí*. He began his *guruship* by practising austerities to secure the favour of the goddess *Durga*, whose divine assistance he needed in order to wreak vengeance on the Musalmán rulers who had punished his father for his misdeeds. The moral obliquity of the Sikhs is not to be wondered at. Their surroundings were against all integrity of morals. We are told of this *guru* that he was a proficient in the science of *Kok*. But this statement never seems to have affected his position as *guru*.

His life was that of warrior-priest or a Knight Templar. His eccentricities are regarded as his religious teachings. His worship of iron, because by its aid he plundered, is one. His institution of the *kes*, or unshaven hair, is another. He lived at *Anandpūr* while his own hair grew. Hence this place is sometimes called *Kesgurdh*. He wore a comb, to comb his hair with, a dagger and a sword. His dress consisted of a pair of short cotton breeches which came part way down the thigh. He abolished caste,

instituted *pahal* or baptism, created the khalsa and ordered all his baptized disciples to be called *Singhs*. Besides this he wrote a book in which all his ideas are stated. This he called the "Granth of the 10th reign or Guruship." The one compiled by Arjan is known as the "Adi Granth." But Govind's Granth is not all his own. It consists of compilations from the works of the poets he had about him.

His wars with his neighbours could not long go on without the interference of the imperial troops. Two of his sons were killed in these disturbances. Two others were slain at Sarhind by the governor into whose hands they had been betrayed. This act has obtained for this city the Sikh title of *fitmunkh* "the accursed." Govind Singh himself became a fugitive. In Málwa, at a place called Damdama, he at last found refuge. But he afterwards removed to Anandpúr. After the death of Aurangzeb he once more came into public notice and took service under Babádúr Sháh, who gave him a military command in the Dakkin. He, however, returned to Anandpúr for awhile to look after the affairs of his guruship, which were getting into confusion through the extortions of his tithe collectors. After this he went to Nander in the Nizám's Dominions on the Godavery, where he was murdered by the sons of a man whom he had himself murdered. It seems that he had purchased horses from this man and had not paid him. The man wanted his money and dunned the guru for it. The guru, who was never famous for meekness, getting angry one day slew him.

Thus we see that the last two gurus, father and son, came to a violent death which resulted from their own wrong-doings. Govind Singh was murdered in 1708 A. D.

Much false sympathy has been bestowed on the fate of these two men. But the truth is that were two such men to arise now in India, there is no doubt they would be hunted down. No sooner did Rám Singh, the Kooka leader, try his hand at raiding, than the authorities were after him. His people were taken red-handed, fresh from their fight, and they were blown from guns by the Deputy Commissioner of Ludiana and the Commissioner of Amballa. The former officer was strangely enough made to go on pension (thus losing about a thousand rupees per mensem), the latter officer was appointed to an ambassadorship to Central Asia and knighted.


Govind Singh was the last Guru. He appointed a faqír, named Banda, to the leadership of the Sikhs. This man seems to have been ignorant of the precepts of Govind. But he understood and followed his practice. This in the course of a short but dreadful career of eight years' constant depredations caused him to be taken prisoner by the imperial army at Gurdáspur in the Panjáb. He was taken to Dehli and put to death by frightful torments in 1716 A. D. No Sikh bemoans his death. He was a man whose actions were so cruel, that in those days an example was necessary.

After the imperial government had seen what the outcome of the Sikh movement was, there was not much enquiry as to their principles and doctrines. They were disturbers of the public peace, and as such they were hunted and slain.

■ We have now to trace briefly the history of the next 83 years in the Panjáb. In 1799 A. D. Ranjít Singh took Lahore. But from the death of Banda to the accession of Ranjít Singh an interval of 83 years has to be accounted for. It will easily be understood that the chance of plunder, combined with the performance of a religious act, would serve as sufficient stimulus in the heart of every Sikh to action against the Musalmán authorities. Unfortunately opportunity was not wanting. The imperial family at Dehli was like a wheel of sixteen spokes. The first had been strong enough. But they had been prosperous. Prosperity had begot luxury and luxury, debauchery. The successors of Akbar and Babar could no longer rule. The empire lay at the mercy of any one strong enough and bold enough to take it. Nádír Sháh invaded India in 1738-9. The results of his invasion are well known. Both before and after this Persian incursion there was a Muhammadan governor of Lahore. The Sikhs, who formed themselves into plundering companies, were on several occasions out-manœuvred, taken, and executed. After the death of Nádír, Ahmad Sháh Abdállí or Durrání obtained the ascendancy in Kabul, and of course he regarded India as his lawful prey. But from the death of Banda to Ahmad Sháh's first invasion of India in 1748 A. D. there is a space of 32 years. During this time Sikhism, in spite of Muhammadan suppressions had prospered, as all wrong prospers where it is not exterminated. Hence during this first invasion the Sikhs erected a small fort at Amritsar. This fort, when the invasion was over, was destroyed by the Muhammadan governor of the Panjáb. The invader was a Muhammadan and the defender was a Muhammadan, hence both were to the Sikh his legal prey. Lahore was taken a second time by Ahmad Sháh in his third incursion in 1752 A. D. In this period of change the Sikhs prospered and increased in numbers.

The fourth invasion of the Abdállí took place in 1755-6, Prince Taimin was then made governor of Lahore. He drove the Sikhs out of Amritsar and destroyed the stronghold they had erected. But in his turn he was so harassed by the Sikhs that he was obliged to retire to Multán, and the Sikhs occupied for a short time Lahore and Amritsar. It was during this temporary occupation of Lahore that the first Sikh rupee is said to have been struck by Jassa Singh Kullál, the Sikh leader. It had on it the following inscription in Persian :—

سکه زد در جهان بفضل اکال
ملک احمد گرفت جسا کلال

Mr. Lepel Griffin in his "*Rājāhs of the Panjāb*"* says "Nor were these coins struck before 1762, not in 1757-8, as stated by Cunningham, and it is very doubtful whether they were ever struck in large numbers at all. The Rājāh of Kupurthalla has none in his possession, nor do I know any one who has seen one. The "*Tawarikh-i-Panjāb*" of Ganesh , states that the Sikhs did not strike this coin, but that the Kazis and Mullahs in 1764, after the famous Nānak Shāhī rupee had been struck, and desiring to anger Ahmad Shāh against the Sikhs, coined 21 rupees with this inscription themselves, and sent them to the Shāh at Kābul, who was as indignant as they anticipated at the insolence of the Distiller (Kalāl) who claimed to have seized his country (*Mulk-i-Ahmad*)."¹ I may add that I have hunted through some thousands of Sikh rupees myself but have never seen one yet. If they were sent to Kābul to Ahmad Shāh direct, he probably broke them up at once.

The Mahrattas were at this time paramount in Dehli. They became naturally the rulers of the Panjāb and they took Sirhind, Lahore, Multān and Attock. This brought Ahmad Shāh once more to India. His fifth expedition was in 1759-61. He retook the Panjāb and extended his arms across the Ganges. (He struck rupees in his 14th year at Murādābād). But the one great action of this campaign was the battle of Panípat in 1761, in which the power of the Mahrattas in Northern India was utterly destroyed. Ahmad Shāh did not know how to improve a victory. He left for Kābul immediately after Panípat. Of course the usual thing happened. The Sikhs rebelled against his governors, and that rebellion induced his return in 1762. In this invasion he turned his arms chiefly against the Sikhs who on all previous occasions had always hovered around his armies whether victorious or defeated. They had never been well taken in hand before and had received but scant attention from the conqueror. Hence their numbers had increased marvellously. From the fact that the Sikh loss in the great battle which took place "between Gujerwal and Bernala, twenty miles south from Ludiana," is estimated at from twelve to twenty-five thousand men, we may calculate the full Sikh power at that time at something between fifty and a hundred thousand fighting men.

On his return from this great victory Ahmad Shāh not only destroyed the temples around the tank at Amritsar, but he killed cows in them and washed the Muhammadan shrines, which had been defiled by swine's blood, with the blood of slaughtered Sikhs.

The Sikhs were not, however, destroyed. The truth is that during all this anarchy and invasion and counter rebellion, there had been many important families in the Panjāb rising quietly into power and importance. These families had summoned their retainers round them. The leaders and

* Footnote, p. 505.

the retainers had one common ground for discontent, one common bond of union, their faith. They were Sikhs. Their oppressors were Muhammadans. Each of these leadings was called a Misl. The whole of the Misls was termed "the Sarba Khalsa or whole Sikh people." Here were then materials for the formation of a mighty republic in the East. But there was only one Washington on earth in those days and he was in America. The spirit which animated him and his fellow countrymen was one of liberty and law and desire for the common weal. In the Panjáb there was no such man and no such spirit. The Panjáb had passed through no preliminary training and was not fitted for liberty. Each man, as he had risen by oppression, maintained himself by the same means. His chief thoughts were for self-aggrandizement. Hence these twelve Misls of the Sikhs became twelve centres of jealousy. So long as Ahmad Sháh kept on invading India, they remained to a certain extent united against a common foe. After he left India, after his 7th expedition in 1764, the Sikhs for a while combined. They were to have had a "Gurunata" or assembly of the chiefs (a congress or parliament) once a year, but it never came to anything, or its meetings were attended only by the religious. One thing is certain, they got possession of Lahore and Amritsar. And at this time they struck, in Lahore the political capital of the Panjáb, the first Sikh rupees. They were called "*Gobindsháhí*," not "*Nának Sháhí*" as Mr. Griffin states. The latter term came into use afterwards as we shall see. The inscriptions were the following :—

Obverse—

Reverse—

دیگ نیغ و فتح و نصرت بے درنگ ضرب دارالسلطنت لاهور
یافت از نانگ گورو گوبند سنگه سمیت ۱۸۴۲ میمنت مانوس

See plate V, fig. 1. It is a rupee of good, almost pure, silver, weighing 177 grs. which is the average weight of the rupees of the Moghuls. The distich on the obverse is intended for Persian poetry. It means "Abundance (the word is *deg* = cooking-pot; we have the same vulgarity in England—'to keep the pot boiling' means to have food sufficient for daily use) the sword, victory and help without delay, Guru Gobind Singh obtained from Nának." The Sambat year on the reverse is 57 years in advance of our year. Hence this rupee was struck in 1765 A. D. I have rupees of this type struck in Lahore, for the years 1822, '25, '26, '27, '28, '30, '31, '32, '33 and '34. There was an interruption in 1766 and '77 (*i. e.* in 1823 and '24) caused by Ahmad Sháh's last descent on India. There may be rupees for some of the missing years. But we can scarcely expect to find them for the years 1823 and '24, S. Ahmad Sháh invaded India for the last time then. During this invasion the ruler of Patiala received from

Ahmad Sháh a *sanad* making him a Maharájá. He is therefore the oldest Maharájá in the country and unlike all the rest was created such by a Musalmán.

The years after the departure of Ahmad Sháh were times when one misl after another became pre-eminent. The whole of the Panjáb lay at their mercy. Multán, Kussúr, Pákpattan, Kángra were scenes of many a bloody fight. It was not so much then Sikh against Muhammadan, but Sikh against Sikh, Misl against Misl. Taimúr Sháh son of Ahmad Sháh was obliged to come against Multán in person in 1778-9 A. D., and it was surrendered to him by the leader of the Misl occupying it. But Sikhism had no more interruptions from Afghánistán during the time of Taimúr Sháh. From Delhi, too, little opposition was shown. The steady way in which rupees were struck in consecutive years shows that the mint towns were comparatively free from attack.

Fig. 2, Pl. V, is a rupee struck at Amritsar in 1835 S. The inscriptions are both quite different from those on fig. 1.

Obverse—

شاه ناك صاحب
فتح سعي گورو گوبند سنگه فضل
سنگه زد بر هر دو عالم صاحب

Reverse—

ضرب سري امبرت سر
جلوس تخت اكال بخت
سميت ۱۸۳۵

I do not pretend here to give correct readings. The reverse is I think correct. I have four rupees of this series 1835, '36, '37, '38. They enable me to read the mint as *سري امبرت* distinctly. The *b* and the dot under it are most marked. The reading of the obverse is far from satisfactory. The 3rd line is not in my figure. But it is all on a coin which I have of the year 1836. The middle line is correct. The top line has *Sháh Nának* on it undoubtedly. The whole may be read thus—"The man of victory, obtained by the exertion (*سعي*) of Guru Gobind Singh and the grace of king Nának, struck this coin in each of the two worlds." I must confess I am not satisfied with this rendering. But after years of search midst thousands of coins I am able to do no more with certainty. This therefore is the Nának Sháhí rupee.

Fig. 3, Pl. V, is a rupee also of Amritsar. But it returns to the obverse on fig. 1. In the reverse inscription, however, are some new features, first the *kaṭār* or dagger: (2) the word *جلوس* and (3) the word *احد*. The full reverse is this:—

ضرب سري امبرت سر
سميت ۱۸۴۱
جلوس ميمنت مانوس احد

I have a rupee of this same year with a similar obverse, but with the reverse containing, instead of Amritsar *انند گهر* and instead of the *kaṭār*, a *gurz* or *mace*. It will be seen at once that *Anandgarh* is spelt incorrectly. It ought to be *انند گڑ*. (This place is the fort in Anandpūr to which we ~~have~~ so often referred. It is a town at which an annual fair is held to which all fanatical Sikhs resort. At one of these fairs one of the most accomplished Panjābī scholars, the Rev. Mr. Janvier of the American Presbyterian Mission, was cruelly murdered by an Akālī. The word *احد* too comes on this one. So here we have a first year of some new government or era. The *kaṭār* and the *gurz* would seem to indicate that it was to be one of brute force. I cannot say what it refers to. Just then Sikhism was in a ferment of raids and excursions and internal broils. There was no one leader pre-eminent. Combination seems to have been the custom just then. This word *احد* is used by all the Mughal emperors on their rupees from the time of *Shāh Jahān*, instead of the figure 1, for the first year. So that the existence of this word in this position indicates that in this year some new rule was inaugurated. In fig. 4, pl. V, we have on the obverse the figure ۳ above the word *فضل*, and ۴۳ on the reverse, thus showing that this rule or reform or new administration lasted for some time. In all Mughal rupees the same rule is followed. The year of the Hejira is on one side and the year of the reign on the other: only as a rule the latter comes with the mint town and the former with the king's name.

It is of this time 1841 S. = 1784 A. D. that Cunningham writes, "The Sikhs were predominant from the frontiers of Oude to the Indus." It was at this time that Mahā Singh, the father of Ranjīt Singh, entered on that series of moves which landed him the head of the Sikhs. His son Ranjīt was born in 1780. He himself died young, at the age of 27 only, in 1792, during his siege of Gujrāt. But the coin I am inclined to attribute to the Sikh ascendancy, rather than to Māha Singh. Ranjīt Singh never put the year of his reign on his coins.

Figs. 5 and 6, pl. V, are reverses of Anandgarh coins of 1844 and 1846. I have one other of 1843 struck at the same place.

Their obverses are all the same as that of fig. 1.

The inscriptions on fig. 4 call for attention:—

Obverse—

remains of

Reverse—

نانگ تیغ
(فتح) رگو بند سنگه فصل سہا (ساہان)
سکہ زد بر ہر دو عالم

ضرب سری امبرٹ سر
مہمیت تخت اکال تخت
سنہ جنوس ۱۸۴۳ (۱۸)

میدنت بخت اگال تخت I regard as Pūnjābī Persian which there is more jingle than either good-grammar or clear meaning.

Akāl takht should mean the throne of the *Timeless one*, that is of God, and should go along with *Amritsar*. *Maimanat bakht*, both words mean the same, *prosperity*. *Bakht* is usually preceded by an adjective when used in a compound word. The language of the Granth Dr. Trumpp tells us is full of such jingle in which we seek in vain for clear meaning.

The term *ساحا شاهان* comes for the first time, on this coin. *Sachcha Sháh*, "true king," is the title by which in the "*Sákhí Book*" Gobind Singh is always addressed. Here it is used in the plural (I have shown this in 7 and 8) and probably has to do with both *Nának* and Gobind Singh; for here *Nának* is not preceded by the term *Sháh*.

The years between 1846 S. and 1856 S. must have been years of great distraction and disorder all over the Panjáb. I find my cabinet, after my diligent search of years, without any rupees of this period except an Amritsar rupee of 1854.

In June 1856 S. Ranjít Singh entered Lahore. Before that time the city had been in the possession of at least three Sardárs, each of which held a portion of it. We do not need to give imagination much rein in order to conjure up a picture of what Lahore must have been during that period.

The historian of the Panjáb Rai Kanhiya Lál, C. E., has the following passage in his history of the Panjáb in Urdu prose, about what happened after Ranjít's entry into Lahore. The poets being all present:—

حکم ہوا کہ کوئی ایسا مصرع فارسی میں تجویز کریں جو روپیہ
پر مصروب ہو اُس میں گورو نانک و گورو گوبند سنگھ کا نام بھی
آجائے چنانچہ بعد غور و تامل ے یہ شعر پسند خاطر ہوا — دیگ
و تیغ و فتح و نصرت بید رنگ • یافت از نانک گورو گوبند سنگھ
یہ شعر جب پسند ہوچکا تو دار الضرب ے اجرا ے لئے حکم
نافذ ہوا اور فرمایا کہ ایک طرف روپیہ ے یہ شعر مصروب
ہو اور دوسری طرف رنجیت سنگھ لکھا جائے اور شہر کا نام تحریر ہو
جسجگہ وہ مصروب ہوا ہو چنانچہ اُسی روز شگون اجراء تکمال کا
عمل میں آیا دوسرے روز کئے سو روپیہ مصروب ہوکر پیش ہوا وہ
سب مسکینوں اور محتاجوں کو دیا •

This is all wrong. The distich in question was used first, as we have seen, on the rupees of 1822 S.* It was not made for the 1st year of Ranjít

* History of the Sikhs. 2nd Edition, p. 179.

Singh. Neither were rupees struck quite so early. I have never seen a rupee yet of 1856. But I have several of 1857, struck in Lahore and these were the rupees first issued by Ranjít Singh. But they do not contain his name. Ranjít Singh put his name on nothing, gave his name to nothing. Fort he built at Amritsar is called Gobind Garh; the garden he made there, Rám Bāgh.

The rupees of 1857 S. = 1800 A. D. are shown in figs. 7 and 8, Pl. V. I have given both sides. There is no sign of "Ranjít" any where. Figs. 9 and 10 of the same plate give the obverses of two coins of 1860 S. and 1864 S., both struck at Lahore and containing the same inscription. A careful study of these will show how difficult is the task of reading coins which contain only a few of the centre words of the inscriptions. On the reverse is an anchor which on Lahore rupees is a new sign. Since the plate was drawn other coins have turned up: but they add to the inscription and confusion. The cross lines are the difficulties. The lower one on the obverse evidently is the حب of صاحب. The top one I have not yet read. However here are the complete inscriptions as far as I can make them out.

Obverse—

سب تیغ نانک واهب سب
(ار فتح فصل کوید سنگه سمحاشاعان صاحب)

سکه زد بر سیم و زر

Reverse—

Same as on No. 1.

With additions of anchor and leaf.

After the accession of Ranjít Singh rupees were struck regularly every year at Amritsar and Lahore. After the conquest of Multán there must have been a mint established there, for the rupees run in pretty regular series. It may be as well here to give the events of Ranjít Singh's career after the capture of Lahore.

1801-2. Reduces Banghí Misl and Kussúr becomes tributary.

1802. Takes Amritsar.

1803. Repulses Sansár Chand, a hill rájá.

1804. Again repulses Sansár Chand.

1804-5. Obtains homage from governors of Jhang, Sahíwal and Multán.

1805. Holkar goes to the Panjáb, pursued by the English. Last Gurumata or national Sikh Council held. After this the Panjáb may be regarded as a kingdom or absolute monarchy.

1806. Ranjít Singh interferes south of Satlaj. Takes Ludiana.

1807. Takes Kussúr and the town of Multán but not citadel: still obtains tribute.

1808. Sikhs south of Satlaj ask for British protection.
- 1808-9. Mr. Metcalfe sent on mission to Ranjít. R. again invades territories S. of Satlaj.
1809. British troops occupy Ludiana. R. signs first treaty with British. He gets Kángra fort.
- 1809-11. Disturbances with the Gurkhas.
1810. Ranjít fails again in obtaining Multán.
1811. Sháh Zamán goes to Lahore. Ranjít Singh conquers states south of Kashmír.
1812. Sháh Shúja and family go to Lahore.
1813. Ranjít obtains possession of Attock. Sikhs defeat Afgháns afterwards near the town.
- 1813-14. Ranjít gets possession of the Koh-i-Núr diamond. Sháh Shúja and his family escape.
1814. Ranjít fails in an expedition against Kashmír.
1815. Comparative rest.
1816. Small raid towards the S. W.
1817. Nothing important.
1818. Multán taken after a siege of several months. Later in same year occupies Pesháwur temporarily.
1819. Kashmír conquered.
- 1819-20. Dera Gazi Khán conquered.
1821. Dera Ismáel Khán subdued.
1822. Minor quarrels, Ventura and Allard arrive in Lahore.
1823. Battle of Noshéhra. Pesháwar reduced but not retained.
1824. Rebellion of Muhammadan tribes near Attock.
1825. Intentions on Shikárpur.
1826. Sick.
1827. Mission to Governor-General. Disturbances at Pesháwar.
- 1827-30. No conquests.
1831. Ranjít Singh meets Governor-General at Ruper.
1831. Expels Daudputras from S. W. Panjáb.
- 1831-3. Various negotiations. Fort Attock built.
1833. Sháh Shúja leaves Ludiana for Afghánistán. He defeats Sindhians in January 1834 near Shikárpore, but he is himself defeated in July at Kandahar. He returns to India 1835.
1834. Ranjít Singh annexes Pesháwur. Tank and Bunnoo subdued. Ladakh reduced.
1835. Claims Shikárpur but makes no attempt on it.
1836. Ranjít restrained by English from attacking Sind.
1837. Battle of Jumrúd in which Harí Singh was slain and two guns lost.

1838. Negotiations about Sháh Shújá.

1839. Ranjít Singh dies, 27th of June.

The rupees of the next two or three years follow one of the preceding types. They were struck in Lahore and Amritsar. The latter rupees, however, from 1861 S. (perhaps 1859 S.), show another sign. I have drawn on Plate V, figs. 11, 12, 13, 14, 15, 16, and 17 to show them. The first four have a sign on the obverse, of a double branch. This is supposed to represent a peacock's tail. The one on No. 15 is a different attempt, I cannot say better. The figure on No. 16 is quite different. It represents the *árisí* or thumb mirror worn by women of loose character. No. 17 has a branch only on it. The dates are 1861, 62, 62, 62, 63, 63 and 66 respectively.

During all these years a woman named Mora, whom Ranjít Singh first saw at a dance at the Shalimár gardens at Lahore, a dancing girl, ruled Ranjít Singh. Such was the power she had over him that the two often appeared in public on an elephant in a state of intoxication. One day she laid a wager that she would do the same as Núr Jahán had done with Jahángír, get her name on the rupees of Ranjít Singh along with his. This, Cunningham says, she accomplished. "In 1811 he caused coins or medals to be struck bearing her name."* But the coins do not bear out the assertion. She put her mark on the coins. Mora means a peacock. Hence the tail of the peacock is her mark. The coins are known as Mora Sháhí rupees amongst the bankers, although the profession of the woman is always added *Mora Kanchní* (the prostitute). The mark on No. 16, the *árisí* is not necessarily the mark of a dancing girl. It is often worn by wealthy, vain women of all castes. There is one feature of all these rupees of Mora. The *alíf* in the word *Akál* is left out. The inscriptions are the same as on fig. 2 of Pl. V. Mora was afterwards discarded. According to the Sákhi Book one of the most grievous sins a Sikh could commit was to keep a Muhammadan woman, and Mora was a Kashmiri and therefore a Muhammadan. The Sikh community stood it for a long time. But they determined to punish Ranjít for his continued debauchery. They therefore in the first place refused his offerings to the temple. Then they summoned him before an assembly of priests at Amritsar and the conqueror of the Panjáb, with folded hands and bare feet, had to acknowledge his sin and profess penitence and ask for forgiveness from the representatives of the Khálsa. They fined him a lakh and a quarter of rupees: but the wily sinner pleaded poverty and got off by paying 5,000 rupees. The fine was probably more than the gifts they had refused, and Ranjít packed off†

* History of the Sikhs. 2nd Edition, p. 179.

† She was the cause of all Ranjít's hesitation and folly on the occasion of Metcalfe going to the Panjáb court. It was for her sake he was always returning to Amritsar.

Mora to Pathánkoṭ and consoled himself for her loss with the charms of another woman, named Gulbegam, and other unmentionable loves. He, long before his death, became a confirmed drunkard and a more confirmed debauchee. Dr. Macgregor's book reveals many weaknesses of the Sikh conqueror.

The coins after the Mora series go on steadily. The Amritsar rupees keep to their own inscription. The Lahore rupees have the third line of obverse as on fig. 8. Figs. 17 and 18 (the latter on Pl. VI) show the 3rd line of the Amritsar rupee inscriptions. Fig. 8 shows the third line of the Lahore ones.* Pl. VI, fig. 19 is a rupee struck at *Multán Dár-ul-Amón* "the abode or gate of peace or safety." The inscriptions are the same as those on the later Lahore rupees. The leaf is along with the *mint town*, not as in the Amritsar rupees which have the leaf for the first time in 1859 S., afterwards in 1866 S. and afterwards regularly as shown in fig. 18, pl. VI. I have not been able to trace the origin of this sign.

Up to 1884 S. the rupees had the *year* on the *reverse* of the coins above the end of *ب* in *غرب*. This year 1884 S. appears on all the coins of the next ten years and sometimes afterwards. The real year is put on the obverse as in fig. 20, pl. VI, where we have the figures ۸۱ between *گوند* and *فضل*. I have the whole series going up to 1894 S. or rather 94 S., for the other figures are dropped in the obverses. Fig. 22, pl. VI, goes up to 1900 S. in the obverse, keeping 1884 in the reverse.

The year 1885 S. has rupees of its own without any year on the obverse. But this year is retained on the reverse of all the later Sikh coins, down to the year 1906 S., the date of the battle of Gujrat, the real date of the rupee being placed on the obverse. Fig. 25, pl. VI is of the year 94 S., but it has 1885 on the reverse. I have given it, because it has a *katár* to the right of the *alif* in *akál*.

Fig. 21, pl. VI calls for remark. On the obverse it has the inscription of fig. 1, pl. V. On the reverse is a circle of dots in which is a leaf and *Sambat* 1884. The margin is only partly legible. *Akál* is there and so is *Kashmír*. Kashmír was conquered in 1819 A. D. = 1876 *Sambat*.

Fig. 22 is worthy of notice as showing an Amritsar rupee with the original distich on it as on fig. 1, Pl. V.

Fig. 23 claims separate notice. The obverse contains the inscription of No. 1, Pl. V in fine condition, every letter being visible. The reverse has two figures on it, Nának and his Muhammadan fellow wanderer Mardáná. Below these are the words "*Zarb-i-Ldhore* 1885." But the real date is 93 as shown in the obverse. The origin of this retention of

* In Plate VI, owing to some obtuseness of my own, I have put the reverses of coins to the left and obverses to the right, reversing the order followed in the Vth plate.

the years 1884 and 1885 has been explained to me thus. There is a class of faqirs who say that, inasmuch as the number of breaths a man will take is numbered when he is born, the more slowly people breathe the longer will they live. I suppose the idea may have got into Ranjít Singh's ~~idea~~ (he was the slave of all kinds of superstitions as well as lusts), that if he could manage to drag out one year to the extent of *ten*, his life would be all the longer, the number of years being originally fixed. This rupee, the only one I have seen of this kind, is the property of the Rev. J. Doxie who kindly made me an electrotype copy of it.

Fig. 24, Pl. VI is a Peshawar Sikh Rupee. Obverse as in fig. 1, Pl. V with year 1894. It was struck by Hari Singh and the date is that of the battle in which he lost his life 1894 = 1837 A. D. = date of battle of Jumrúd. The reverse has on it *Zarb-i-Pesháwar Sanat-i-Jalús* 1894. The date is on each side and it is the same year. It is a light rupee, weighing only 135 grs.

The remaining figures on pl. VI are those of rupees struck after the death of Ranjít Singh. He died in 1839 A. D., as we have seen 1896 Sambat. Fig. 26 is a rupee of 97 S. It has on it Om in Panjábí letters.* Mr. Lepel Griffin says that there is a rare rupee with "*Ung*" on it, which he says means God. Now I have never seen this word. I think it must be a mistake for Om, the invocation in common use in Thibet. *Ung* does not mean *God*, it only means *body*.† Thus *Devánga* means God incarnate or embodied God.

Fig. 27 is a rupee of the year 99 with a trisúl on it.

Fig. 28 is a rupee of the year 1900 S. with an umbrella on it.

Fig. 29 is of 1902 with an umbrella to the staff of which is attached a flag

Fig. 30 is of 1904. It has on it a canopy under which is the word *Sat* in Gurmukhí or Panjábí letters. *Sat* = the True, *i. e.*, God. Below to the left is a very peculiar knot.

Fig. 31 is of 1905. It has on it again the canopy and *Sat*. To the left is a thorny club.

All these coins from figs. 25 to 31 inclusive are of Amritsar. They have the inscriptions on the obverse varying from fig. 4 in several points and also from those in fig. 2.

Obverse—

نانك
فتح تیغ گورو گویند سنگه فضل
سكه زد بر هر دو عالم

The cross bars are eliminated. I can assign no meaning to them, although I have no doubt they are an important part of the inscription.

* Panjáb Rájáhs.

† *Om* is a Brahmanic symbol of the Deity, well-known throughout India. *Ung* is merely an anglicised spelling of it, and does not mean body, which is *ang*, Sanskrit *anga*. Ed.]

Fig. 32, Pl. VI is a Multán rupee of the year 1899 S. The rupees of Amritsar are the only ones which have the double year on them. Those of Multán and Lahore have only one year on them. This rupee has on the reverse, together with the leaf, a *thorn* mark. On the obverse is a lily. The Lahore and Multán rupees, as a rule, follow the type ~~of the~~ coins of 1857 A. S. in their inscriptions.

There were gold coins struck also by Ranjít Singh. I give one in Pl. IX, fig. 74. Its inscriptions will at once be recognized.

We will now go on to the Gurmukhí and other coins of the Sikhs, Guru=teacher, mukhí = mouth. Hence Gurmukhí = language of the Guru, which is the Panjábí of the people. The characters in which the language is written are of Sanskrit origin.

Fig. 33, Pl. VII is a gold coin weighing 167 grs. It has on it, in Gurmukhí, the obverse of fig. 1, Pl. V. But the reverse is "*Wáh Gurú jí, Wáh Gurú jí, Wáh Gurú jí,*" the religious cry of the Sikhs. It has no date on it and no mint. It is the only one I have ever seen in gold in Gurmukhí. Its weight indicates that it is a regular mohur and not a medal.

Fig. 34, pl VII is a silver coin in Gurmukhí, weight 115 grs. Obverse as on obverse of 33. "*Deg, tegh, fath, nasrat i be darany yáfút aj Nának Guru Gobind Singh.*"

Rev. "*Jarb i Kashmír i Srí Akál Purukh jí.* Year 189—.* On the obverse is a sword crossing a shield, on the reverse is the leaf†. "*Srí Akál Purukh jí*" is the commencement of the "*Akál Astut*" a hymn in praise of the Timeless one, which hymn follows the *Japjái* in Guru Gobind's Granth. The words mean "hail, timeless Divinity."

These two Gurmukhí coins are in my cabinet. I got the gold one in Ludiana and the silver one in Lahore. I have as yet seen no others in any cabinet or museum.

The rest of the coins on Pl. VII require but scant notice. They are all of copper and are chiefly remarkable for their great weight and bold execution and extreme rarity. They are not old. There are full dates on two; both the same 1885. Nos. 35 and 37 are probably of the same date or near it. The hexagonal ones I thought had been hammered into that shape after coinage. But this is impossible. Since drawing the plate I have got another weighing 322 grs. There may be more. I had to pay a rupee each for these large ones, as I find the Sikhs worship them. They contain full inscriptions and the name of Nának, and that is all a real Sikh wants. The broad Muhammadan rupees of Akbar fetch a large price

* See Introduction to Trumpp's Granth. Footnote, p. xc.

† Kashmír was conquered by Ranjít in 1819 A. D. = 1876 S. So this coin was struck some time after the conquest.

in the market, owing to the fact that they contain the Kalimah on one side. The inscriptions are thus—

Obverse of all:—*Akál Saháí, Guru Nának Jí*," devices various.

Reverse:—" *Jarb Sri Amratsar jí*" and date, device a leaf. In No. 40 every letter is perfect. The dies of the rupees must have been as large as these large coins. No. 41 is a smaller sized one, of less weight, but with the same inscription, weight 175 grs.

No. 42, Pl. VIII is a bilingual coin in copper with a variety of the previous inscription. It reads obverse:—" *Bábá Nának jí Sahá.*" Reverse:—" *Yak falús*" in Persian. *Bábá* = *pádri* is the term of endearment whereby the *Gúru* is known amongst his followers. The date on this coin in Arabic figures is apparently 1900 S.; weight 153 grs.

No. 43 has the same inscriptions, mutilated in Gurmukhí and with ornaments on the Persian side,

Nos. 44, 45, 46 are obverses of small coins struck in Amritsar. They have in them the inscription of the copper coins of Pl. VII. Their devices are respectively a *kaṭār* and a flag.

No. 47 is the reverse of an Amritsar coin. It has "*Jarb Sri Abratsar*" on it. The *m* is omitted. With the leaf is a star or thorn.

No. 48 has on the obverse the inscription on rupees fig. 26 &c. Reverse is "*Páo ána i Nának Sháhí*," a quarter anna of the *Nának Sháh*. The *Páo ána* is not on this specimen, but on one I got while this paper was in hand.

No. 49 has a similar obverse with date 1896 S. over the Panjábí word *san* = year. The date is repeated on the reverse, above a leaf which is surrounded by beads. There are remains of words which indicate that spelling was not a strong point with the Sikhs. It was struck at Derajat. But there is an *ain* (ع) introduced.

No. 50 is a coin of the same parts. It is given only in the reverse. Inscription is "*Zárb i Dera*" (جأت.)

No. 51 is noteworthy as having *two* leaves on the obverse with the inscription going round them. It has also the *same inscription* repeated on the other side of the coin.

No. 52 has the usual obverse inscription. But the reverse one goes round a leaf and is *Jarb Amra(tsar)*, which is the only place where the name of their capital is spelt correctly.

No. 53 is a coin of which I regret I have as yet met no large full sized one. On the obverse it has the usual inscription. But on the reverse it has "*khalasa jí, jarb Amratsar jí*" round a leaf. It was therefore struck by the *Khalasa* or *Khalsa*. Weight 178 grs.

No. 54 is an ordinary coin as to inscriptions. But the figure of a lion shows that it is one of *Sher Singh's*. The Sikhs never were great artists.

No. 55 is a copper coin with the Persian inscription on obverse of fig. 1, Pl. V. On the reverse it has also "*Jalús Zarb Sri Amritsar*" 1897 S.

No. 56 has apparently the same on obverse as No. 55. But on reverse it has (*Zarb*) *Kashmír, Sri Akál* 1899 S.

No. 57 is the same as 55, with other words of the inscription not in and on obverse the year 1881 S.

No. 58 is a rude coin with bold letters on it which are a perfect jumble. It is supposed to be the produce of a village mint.

No. 59, Pl. IX is an ordinary piece to look at, at first. But its inscriptions are extraordinary and inexplicable. I have given *four* sketches of it. Nos. 60, 61, 62 are the same coin: "*Akál devakí danaj*" is certainly the inscription. *Devakí* is a name of a man and *danaj* means a dragon.*

On Nos. 63, 64, 65, the same name comes in Persian with "*Akál Guru Nának jī*" in Gurmukhí letters. The reverses of all are just the ordinary Amritsar ones. No one can enlighten me as to the meaning of *Devakí* or *danaj*.

No. 66 has "*Akál Sahái*" in Gurmukhí and *Yak falús* in Persian both on one side. The other side is a smudge, but it has the leaf and therefore the mint name was there once.

No. 67. Obverse "*Akál Nának jī*." Reverse "*Zarb i Khitta i Kashmír* 1789" or rather 20789 which are most extraordinary dates.† There is small flag over *khitta*.

No. 68 is a most extraordinary production. In the middle of a petular star is the word *Nának* in Persian characters. On the other side round a leaf is "*Zarb i Bish*" (or something like this, perhaps it is *Pathá*—it is obscure) *nkot*." The date 1894 S.

No. 69 is somewhat obscure. It contains only the ends of words. They however have not occurred on any we have yet looked at. "*Gat*" is the end of one. Some suppose that it is the end of Guru Angad's name. The device on the reverse is new, a circle with four spikes in it. The date looks all right, but it gives no help and it is in Arabic figures 1729. If however the figures are intended for Gurmukhí ones, there is a slight muddle.

No. 70 is equally obscure. The one word plain on it is "*Dheg*." What the rest means I do not pretend to tell. Some learned Panjábís say,

* [*Devakí* is the name of a woman; Krishna's mother was called so. The inscription is probably incomplete, as shown by the absence of the final *di* in the first line; the last line probably ended in *jī* (as in *Nának jī*). Ed.]

† [It should be observed, however, that 2078 is in a separate place from 9, and that by the side of 9 there is a trace of another number, apparently 5. So that 2078 and 95 would seem to be two distinct dates, of which 95 (i. e., S. 1895) would be very appropriate. Ed.]

it is their way of spelling *Tegh* Bahádur. But *dheg* is so out-of-the-way a pronunciation for *Tegh*, I cannot think this is what is meant. The reverse is equally obscure. Perhaps some larger coins may be found of both these types. (The next letter after the *g* is *p*. Therefore *Dheg Bahádur* may be meant.)

No. 71 is a more satisfactory coin. Obverse "*Sen Singh* 1898" S. The word *Singh* is spelt in the usual vulgar fashion, and the date in Arabic figures reads backwards 8981 like as on some coins of *Hyder Ali*. The reverse has a cross and a leaf and the mint in Persian, but there is not enough of its letters to enable us to make it out. It is a rough coin and the only one I have yet seen bearing a ruler's name, if No. 70 has not *Tegh Bahádur* on it.

No. 72 is a lump of copper. It has on one side in Persian "*Zarb i Kashmir*." On the other "*Samwat* 1880" in a circle. This was struck four years after the conquest of *Kashmír*. The rough coins of *Ahmad Sháh*, struck in *Kashmír*, are exactly of this type, lumps of copper stamped and made current.

No. 73 is just such another piece of metal as No. 72. It has on the obverse in *Gurmukhí* "*Nānak Sá*" (*h*). On reverse it has two swords, back to back, between which is a flower or dotted rays. The whole was enclosed in a double circle with dots. It is a *Kashmír* coin. The inscription may read *Nāna(k) (zarb i) Kash(mír)*.

No. 74 is a gold mohur of 1861 S. It bears the inscriptions of the rupees figs. 26, 27 &c. The only particular thing to notice in it is that it has no *alif* in the word *Akál*. Thus it would seem to have been struck during the period *Mora* was exercising so baneful an influence over the sovereign and his court. I cannot conceive so grave a mistake happening, unless all supervision had been taken away from the mint. It was repeated year after year. It is true the coin was in Persian, and the Sikhs are not Persian readers. The hatred of *Guru Gobind Singh* towards *Muhammadianism* was so great that he prohibited the study of Persian, and positively forbade any one of his followers getting his livelihood by the use of it. And yet as we have seen all the rupees of the Sikhs are in Persian, bad Persian it is true, but Persian. *Ranjít Singh*'s most trusted adviser was the *faqir* (as he in his false humility called himself) *Azíz ud Dín*. *Ranjít Singh* could neither read nor write. He was in learning a thousand years behind his time. Hence I suppose he cared little as to what was on his coins. And his subjects cared less, provided they got good weight and good metal. That the metal is good is shown by the *Nānak Sháhí* rupees being in constant demand for the manufacture of ornaments and from the fact that they sell for 17 annas each, on account of the excellent silver they have in them.

The coins depicted in plates VIII and IX are known as Nānak Shāhī pice. They are sold in the bazaars at the rate of 56, 57, 58 couples (tagge) for the rupee or from 112 to 116. Now 6 Nānak Shāhī pice weigh down 7 of our pice, and hence each one is $\frac{7}{6}$ ths of one of our pice. Hence, roughly speaking, although our pice is of less weight than the Nānak Shāhī pice, the market value of the latter is one half that of the former. These pice are in great demand. Their cheapness enables a man to give away at a marriage 112 to 116 coins, whereas if he changed a rupee into pice struck by the English, he would give only 64. Thus he gives more actual weight of metal and gives more in number. In Amritsar and Lahore and all centres of population in the Panjab they are in great demand. One source of gain of the money-changers is the trade in these pice. They sell them to people who are about to celebrate a marriage. Afterwards in the course of barter and exchange the coins find their way to the shopkeepers and traders who let them accumulate, until they have a rupee's worth, when they sell them to the money-changer again at reduced rates. Each money-changer's stock consists chiefly of these pice. He has hundredweights stored away. As they come from all parts of the country, they are mixed with other odd coins. And it is from these mixed heaps of things that most of the rarest coins of the Panjāb olden times are obtained. For when the coins return to the money-changer, he sets to work to sort them, and every year he gets great quantities (if he is in a favourable part of the country) of coins other than Nānak Shāhī pice. It is from these men I have got all my rarest coins. They are the natural places for old coin deposits. But whereas dealers charge enormous prices for their coins, these men are content if they get three or four times the value of the coin. The stream incoming is constant. I have sometimes visited one of these places as often as twice a week and have never been disappointed yet. The silver coins however do not lodge here. They get only as far down as the sarrāfs and dealers in bullion, and to them therefore I go for rupees and gold coins. Of course if no collector goes near these shops, the copper coins are melted down for the sake of the silver they contain, and the silver and gold coins are melted down for the sake of bullion or ornaments. I am sorry to add that up to the present no collection of Sikh coins exists for the people of the country in which the Sikhs once held sway.*

There is one point still more, worthy of notice, before I close this paper. I mean the ratio existing between silver and copper. I have shown above that the pice sell for from 112 to 116 per rupee and that they are

* [Since the above was put in type, the Panjab Government have purchased the whole of Mr. Rodgers' Sikh coins for the Lahore Museum. Ed.]

heavier, by one-sixth, than an English struck pice which sells at 64 per rupee. At this rate silver is about 72 times dearer than copper. I am inclined to think this is the ratio which obtained in olden times. If so, my calculations with respect to the income of Akbar will have received strong confirmation.

Additional Note.

There are three transliterations which demand explanation, those on the Dera Ghází Khán coins. In my paper the coin I have given was ascribed, according to the most learned Panjábí I could get hold of, to *Tegh Bahádur*. I confessed in my paper that I was not satisfied with this reading. After my paper was sent off, I again visited the bazaar, in the hope that I might find some clue to the deciphering of this to me then unique coin. I got without any difficulty no less than 25 coins of this description, and I at once began to compare them with each other. Then I found that one coin had a little of the top line, another a little of the bottom one, a third a little of the right middle line, and a fourth a portion of the left of the coin, and thus I found out that the coins were struck at *Dera Ghází Khán*. The other transliterations require no notice.

Since this paper was in the press, I have found out rupees bearing the name of *Rám*, struck in *Lundí* and also *Gurmukhí* and *Sanscrit*. I have also obtained one rupee, struck at *Jhang*, and several struck at *Pind Dádan Khán*. I have also seen some gold mohurs in the Lahore Museum struck in Gurmukhí with the same dies as some of the commonest pice, apparently. I have also found some rupees of years not mentioned in the paper, notably one of Multán struck in the year of the capture of that city A. D. 1818 = A. S. 1875, and one of Amritsar struck in 1856 A. S. The subject is not yet exhausted, long and prosy though this paper has been.

The whole of the Sikh coins, gold, silver and copper, in my collection, have been purchased by the Panjab Government for the Lahore Museum. Thus two subjects I had in view have been accomplished. (1) An account of the coins of the Sikhs. (2) The possession by the Provincial Museum of the coins of its own province. Of course there should be in the Imperial Museum at Calcutta a duplicate collection.

JOURNAL

OF THE

ASIATIC SOCIETY OF BENGAL.



Part I.—HISTORY, LITERATURE, &c.

No. II.—1881.

*On the Coins of Charibael, king of the Homerites and Sabæans.—By
Major W. F. PRIDEAUX, F. R. G. S., Bombay Staff Corps.*

(With a Plate.)

In the year 1843 M. Arnaud, a French traveller, discovered at Şan'â and the neighbouring cities of South Arabia a considerable number of Himyaritic inscriptions, which were subsequently collected and published by M. Fresnel, the distinguished Arabic scholar, in the *Journal Asiatique* (IV série, tome V, pp. 211, 309; VI, p. 169). On some of these inscriptions were found the names of two ancient kings called Kariba-êl, one of whom it was tolerably evident, must be identical with the monarch of that name who is mentioned in the twenty-third chapter of the *Periplus of the Erythræan Sea*, as having been the paramount sovereign (ἐνθεσμος βασιλεύς) of the two contiguous tribes of the Homerites and the Sabæans at the time that work was compiled. The name of one of these princes occurs in one passage only (Fres. XXIX) where he is described as *Kariba-êl Bayyân*, son of *Yatha'-amar*, *Makrab* of Sabâ; while the other is mentioned in three inscriptions, first (Fres. XI) as *Kariba-êl Wattâr*, son of *Dhamar-'alî*, *Makrab* of Sabâ; secondly (Fres. LVI), at the end of a long list of princes, as *Kariba-êl Wattâr*; and thirdly (Fres. LIV) as *Kariba-êl Wattâr Yehan'am*, king of Sabâ and Raidân, son of *Dhamar-'alî* Bayyân. A comparison of these names and titles with the text of the *Periplus* affords sufficient evidence that the king mentioned in that work is identical with the second of the princes named in the inscriptions. The writer of the *Periplus* states three facts regarding Kariba-êl, firstly, that his metropolis

was at *Saphar*; secondly, that he was the sovereign of the contiguous tribes of the Homerites and the Sabæans; and thirdly, that, by means of embassies and presents, he established terms of friendship with the Roman Emperors. *Saphar* is universally acknowledged to be the town of *Zhafâr*, otherwise known as *Haql-Yahşib*,* a name which it probably owes to another ancient king of the Homerites, *El-sharah Yahşib*, who is mentioned in one of the inscriptions preserved in the British Museum (No. 33). *Al-Hamdânî*, the historiographer of Yemen, calls *Raidân*, قصر المملكة بظفار, the castle of the kingdom at *Zhafâr*, the seat of government and the residence of the kings. The original seat of the Sabæan monarchy was at *Mârib*, but after the expedition of *Ælius Gallus* and the consequent ruin of that city, it seems probable that the inferior tribe of *Himyar*, which is always represented in Arabian legends as an offshoot of *Sabâ*, rose to power and fixed its capital at the town of *Zhafâr*. It is evident from the text of the *Periplus* that at the time of the compilation of that work the Homerites were the ascendant tribe, and it seems reasonable to conclude that *Kariba-ël* was their chief. The original designation of himself and his father was *Makrab* of *Sabâ*, an inferior title to that of *Malik*, which he afterwards bore, and one which apparently corresponds to the Greek *τύραννος*, under which title we find *Cholaibus*, the subordinate chief of the district of *Mopharcitês*, mentioned in the twenty-second chapter of the *Periplus*. After he had brought the united kingdoms under his sole authority, he assumed the exalted epithet of *Yehan'am*, struck coins, as we shall presently see, at his castle of *Raidân* and consolidated his power by an alliance with the Cæsar of Rome.

The name of *Kariba-ël* belongs to the regular system of Himyaritic nomenclature, and its probable signification is *El has strengthened*. The root *karab* occurs in other Himyaritic names, such as *Tobba'-karib*, *Ma'adikarib*, and is also found in the title *Makrab*, a designation which would seem to have a nearer analogy to the *Podestà* of the mediæval Italian cities than to the *tyrannus* of the Greeks. The root is also found in the Hebrew *Kerûbîm*, those mythical creatures which are represented in the Assyrian sculptures as colossal winged bulls with human heads† and whose strength is asserted in the Bible to be sufficient to support the Deity Himself (2 Sam. xxii, 11; Ps. xviii, 10). The surname *Wattâr* is not uncommon in the lists of the Sabæan kings and is referable to a root which appears primarily to convey the idea of *uniqueness* and thence of excellence. It is cognate with the Biblical name of *Yether* or *Yethro* (*Jethro*). The further epithet of *Yehan'am* which was subsequently assumed by *Kariba-ël* is derived from the causative or Hiphil form of the root *עָמַד* and may

* D. H. Müller, *Die Burgen und Schlösser Südarabiens*, Wien, 1879, p. 37.

† Lenormant, *Les Origines de l' Histoire*, 1880, pp. 112, seq.

be rendered *the bestower of favour*, a designation which would not be inappropriate to one who had secured the friendship of Rome by the means mentioned in the *Periplus*.

Of the extent of Kariba-êl's dominions we have no exact means of judging, but they probably included the greater part of that country which is now, and has been for many years, known as El-Yemen, for it may not be uninteresting to mention that the division of Arabia into El-Yemen *the south*, and Esh-Shâm, *the north*, is of very early date. In one of the inscriptions discovered by M. Halévy at Berâqish in South Arabia, reference is made to an altercation between the inhabitants of the two divisions (בין ימנת וישאמת, Hal. 535, 13). That part of Kariba-êl's kingdom which comprised the south-western extremity of the peninsula was called Mopharcitês and was under the government of the *tyrannus* Cholaibus. This is known to the Arabs as the Beled el-Ma'âfir (بلد المعافر)* and is described in Al-Hamdânî's geographical work, the *Jezîret el-'Arab*. The name of the chief, *Kulaib*, is a diminutive form of *Kalb*, one of the principal tribes of ancient Arabia, and mentioned as a personal designation in more than one inscription (Hal. 396, 1; 662, 1). The authority of Kulaib extended over a considerable portion of the opposite African coast (*Periplus*, § 16). Hadhramaut, however, still existed as a distinct kingdom and was ruled over by a king called Eleazus, a name which under the form of El-'azza (אלעזא), is frequently mentioned in the Himyaritic inscriptions (Hal. 77, 1; 208, 1; 231, 7; 643, 2). The principal city of Hadhramaut was *Sabbatha*, the *Sobota* of Pliny, the שבורת of the British Museum inscription No. VI. 6, and the شجرة of Al-Hamdânî.


The period at which Kariba-êl reigned must be determined by the date of the *Periplus*. Some years ago I examined this question with considerable care, and for the reasons alleged by me in a paper published in the *Transactions of the Society of Biblical Archaeology* (Vol. II, p. 16), I have come to the conclusion that Kariba-êl must have reigned about the year A. D. 75. I believe that this date agrees with that which is now generally received by scholars, and should it differ, it must be considered that the writer of the *Periplus* may sometimes refer a fact to the period of his voyage, and sometimes to the time at which he was working up his notes of travel into the form in which they now exist.

Having said so much by way of introduction, it remains to add a few words upon the more immediate subject of my paper. A few months ago I received from Aden a few silver Himyaritic coins, among which I was pleased to discover two which I had no hesitation in attributing to Kariba-êl Wattâr Yehan'am. The following is a description of the coins, which I have brought with me for exhibition this evening :—

* D. H. Müller, *Reise nach Constantinopel*, Wien, 1878, p. 10, &c.

KARIBA-ËL WATTÂR YEHA'AM.

(The inscriptions are written in Hebrew characters, as Himyaritic type is not procurable.)

1. (Plate X). *Obv.* Head to right, beardless, the hair  three stiff corkscrew curls; round it the inscription כרבאל יהנ and the monogram ח; below head רידן, to right פ.

Rev. Head as in *obv.*; above the head the monogram ח, behind the head the monogram פ; the right side of the coin *in grenetis*.

Ar. Size: '6 in. Weight: 23·673 gr. = 1·534 grammes.

2. *Obv.* Head as in No. 1; around head the inscription כרבאל יהנ and the monogram פ; below head רידן, to right פ.


Rev. Head as in No. 1; behind head the monogram פ; the right side of the coin *in grenetis*.

Ar. Size: '58 in. Weight, 24·49 gr. = 1·587 grammes.

On the obverse the name of the king and the first three letters of his epithet יהנעם are given, below is the name of the mint-place *Raidân*. I am unable to explain the signification of the monogram ח which is also found in two other coins in my possession (one of 'Umdân Yehaqbadh and one of Yada'-ûb Yenâf) or of the symbol פ which is found on all the *Raidân* coins of this type that I have seen. It has also been discovered on some of the sculptured Himyaritic inscriptions.

The monogram פ or פ which appears on the reverse can be resolved into the letters ותר *Wattâr*, the surname of Kariba-ël. The other monogram on the reverse of No. 1 I am unable to explain.

It was my original intention to have added a few remarks upon the subject of the Himyaritic coinage generally, but within the last few days I have been favoured with the proof-sheets of a paper entitled *Neue himjarische Münzen* by Dr. J. H. Mordtmann of Constantinople, which is on the point of publication, and which treats the question in such an exhaustive manner that any observations of mine would be superfluous. It will be sufficient to state that the numismatic system of the Himyarites may be classified into three divisions; the first consisting of thick coins struck in imitation of the drachmas of Athens with the head of Athena, generally countermarked with a Himyaritic character, on the obverse, and a rude imitation of the owl with the letters AΘE on the reverse; the second consisting of thin coins of still ruder execution, which are designed upon the Athenian tetradrachms of more recent date and are sometimes varied by the head of Augustus on the obverse; and the third comprising the series of small hollow-struck indigenous coins to which those which I have exhibited belong. The first two classes have been very ably treated by Mr. Barclay V. Head in the *Numismatic Chronicle*, N. S. Vol. XVIII, Pages

278-284; and Dr. Mordtmann has gone still further into the question and has I think satisfactorily deciphered the rude Pehlevi inscription which appears on the reverse of some of them. I produce for exhibition to the meeting a specimen of the earliest class from my own collection (Plate X, ). Of the second class which have lately become exceedingly common I possess a considerable quantity in England, including the unique gold coin figured in the plate accompanying Mr. Head's paper (Pl. XLII, Nos. 4, 5—16).^{*} Specimens of the third and most interesting class are still comparatively rare. The two coins of Kariba-êl are the first of this class which have been exhibited before any English Society. In addition to these, I produce a coin of Yada'âb Yenâf, struck at *Harb* (Caripeta of Pliny?) (Plate X, No. 3), and three of another king, 'Umdân Yehaqbadh, struck at Raidân (Plate X, Nos. 4, 5, 6). There are a few other specimens in the British Museum, and Dr. Mordtmann also possesses two examples of Kariba-êl and a few others which are described in the paper to which I have adverted. The indigenous silver coinage of El-Yemen appears to have been succeeded by the gold and copper mintages of the Axumite kings of Abyssinia, who are supposed to have secured a footing in South Arabia towards the close of the 1st century A. D. It will be seen from the specimen which I produce before the meeting (Plate X, No. 8) that these monarchs were to a certain extent indebted to their Himyaritic predecessors for the types of their coins, which it is probable were current in South Arabia until the conversion of that part of the peninsula to Islam.

On the Revenues of the Mughul Empire.—By H. G. KEENE, C. S.

AKBAR'S REVENUE.

The *Journal of the Asiatic Society of Bengal*, Part I, No. IV, 1880, contained a paper by Mr. C. J. Rodgers on the Copper Coins of Akbar. The writer, a practical numismatist well known in Upper India, laid down as a principle that it must have been a necessity of the position of the Emperor Akbar, "when he made a demand from his ministers for revenue returns," to fix upon a standard. He gives us the description of a coin called the "*yak tãnka*," weighing 59 grains Troy; and he concludes that the 640 kroris of "*morâdi tankas*" of Nizam-ud-din Ahmad, about which we have heard so much, must be based on the standard of two hundred to the rupee and be equal to three million two hundred thousand sterling a year. He adds that Abul Fazl's estimate of the revenue of the same period in *dâms* will be equivalent to about the same, or three million five

* Dr. Schlumberger (*Le Trésor de San'a*, p. 6, note 2) suggests that this is the same coin as that mentioned by me in the *Transactions of the Soc. of Bibl. Arch.* Vol. II. p. 5, but this is not the case. The coin sent by Capt. Miles to the Royal Asiatic Society from Aden was, I believe, *Axumite*.

hundred and forty thousand. The discrepancy is not fatal, if we suppose Nizam-ud-din to have been giving only the land revenue, while Abul Fazl added the customs. He adds that Thomas's estimates are incredible, and that the subject is one of great importance; in which every one who thinks much about it must agree.

But extreme and conflicting as are Mr. Thomas's amounts, there are numerous difficulties in the substitute suggested by Mr. Rodgers. In the first place there is fair evidence that in the next reign, after Khándes and Gujrát had been absorbed in the empire and Todarmal's settlements had borne their fruit, the revenues ran from twelve millions sterling to about seventeen and a half. The first may be gathered from the statement of Coryat, the wandering Vicar of Odcombe, who was a man of a most inquiring disposition, and who gives the detailed account that the revenue (in the early years of Jahangir) was "forty millions of crownes of six shillings each." The second rests upon the testimony of the *Bádsháh námah* of a contemporary of Sháhjahan's who says that on the demise of the crown the revenue was over 18 *krors*. In the next place, Abul Fazl does not confine his estimate to the 567,63,83,383 *dáms* erroneously given by Mr. Rodgers: he gives it in Rupees, and he repeats it in detail as the aggregate of what he calls his *tagsim Jamas*. In the text of the *Ain Akbari* he says that three *Arbs*, &c. of *dáms* were equal to Rs. 90,749,881, annas 2 and pies 5 and the aggregate of the *tagsim Jamas*, given afterwards, brings the total up, with some customs items, to nearly ten *krors* (9,96,13,850). Now whatever else is to be discussed, we shall hardly go wrong in supposing that Nizam-ud-din and Abul Fazl both meant the same. Both were financial officers of the highest rank, and, as Mr. Rodgers well says, their estimates are for two succeeding years, the 39th and 40th of the reign. Lastly, there is no sufficient ground for assuming that the *dám* was worth so little as Mr. Rodgers supposes. He arrives at his conclusion by taking it as being five times the value of a *tánka* of which 200 went to the rupee; he says truly enough that forty of these *dáms* were equal to the rupee, *vide* Blochmann's *Ain*, p. 31; and hence he infers that this brings out his estimate of 3 *krors* 54 *lakhs*. But it does not do so. Abul Fazl, as we have seen, though he preserves the proportion of 40:1, says that the land revenue in the 40th year was three *Arbs*, sixty-two *krors* ninety-seven *lakhs*, fifty-five thousand one hundred and forty-six *dáms*, or Rs. 90,749,881 which is the estimate in *dáms* divided by forty.

Thus, then, we see that Mr. Rodgers' first principle was wrong, and we arrive at a second proposition: not only must Abul Fazl and Nizam-ud-din mean much the same total, but they express it in different standards. The *tánka** of the one must bear to the *dám* of the other some such proportion as that of three hundred and sixty-two to six hundred and forty; or, in

* It will be seen presently that the word is *tánka* تَنكَا without the *ais*.

other words the *tanka* of Nizam-ud-din must have been nearly the sixty-fourth of a rupee.

Now it seems to me that the coins figured by Mr. Rodgers furnish an indication of this having been the case. His *dám* weighs 76 grains; and a rupee, as he tells us, is worth 6400 grains or thereabouts which is, indeed, about the average market value in copper. Supposing his *dám* to be a little worn it will represent exactly the half of a revenue *dám* ($160 \times 40 = 6400$) just as the modern "pyce" is half the *tanka* or "*takka*" of native accountants. Mr. Rodgers' *tánka* weighs 59 (say without rubbing 60), which could not possibly have been the *tanka*, of which five went to the *dám* (although five times half would be 150, not far from the weight of the *dám*).

The probability, then, is that the *tanka* mentioned by Nizam-ud-din was no real coin, but a copper integer of account used by him from some local or special reason, as the sixty fourth-part of the silver integer, or Rupee.

Now this can be shewn to be otherwise reasonable. The word *tanka* is given in dictionaries to be (what it still is in native usage) the equivalent of two *paisah*. There is no positive evidence as to the value of the *paisah* of those days; the word does not seem to have been established, in its modern sense, till quite recent times. But the Company struck a coin (which they called "*yak pai*") in the name of the emperor; this coin weighed 100 grains. I have one in my possession which has never been rubbed; but I need not send it, as the Society can easily procure one for reference; and Mr. Rodgers, in his concluding note, also mentions the same thing. But if this was the standard of the imperial coinage, under whatever name, it is but natural that the "*murádi tanka*" (which is otherwise so puzzling) should have been the equivalent expression in the days of Akbar. The *paisah* of those days was the same as the *dám* (Blochmann's *Ain*, p. 51.)

In support of my belief that in point of fact the copper *tanka* was an imaginary figure sometimes used in accounting, I would refer to Mr. Thomas (*Chronicles*, p. 49, note). It is not therefore clear on what data the learned author has elsewhere taken the *tankah* of Nizam-ud-din to be the Sikandari *tankah*. If anything is certain, it is that the use of the word "*murádi*" in accounts means that a sum is being expressed in copper. The exact words used by Nizam-ud-din are to be found in the *Tabaqát Akbari* :—

شش صد و چهل کزور تنكه مرادي

"i. e., at the present time Hindustan yields a revenue of 640 krons *murádi tankahs*" (v. Elliot-Dowson, p. 186).

The suggestion that this means ten krons of rupees derives strong confirmation from the following passage in Mr. Thomas's Preface :—

"Indian Currency consisted of hybrid pieces of silver and copper combined in the proportions necessary to constitute the equivalent subdivisions of the ruling silver *tankah*, which was never divided in practice by any other number than 64."

After explaining that the instinct of the Indian was to reckon by fours, and that the copper exchange against silver commenced with four *fuls* to the sixty-fourth part of a silver *tankah*, the author adds:—

"The quaternary scale in short was all pervading; there was no escaping the inevitable fours, sixteens, thirty-twos and sixty-fours, the heritage of the masses which, having survived alike Aryan intrusions and Muhammadan conquest, still flourish undisturbed by the presence of British decimals."

The copper integer or "pyce" of the British currency in India is still 64 to the Rupee; but I am not sure that there is in this any thing anti-Aryan. Indeed we have in England the analogy of our *avoirdupois* weight, which still proceeds upon a scale of sixteen, as our "crown" of five shillings is the fourth of the pound sterling. If, however, sixty-four was the necessary divisor for bringing copper *tankahs* into their silver equivalent, it appears almost inevitable that the *murādi tankah* of Nizam-ud-din is the sixty-fourth of the *mubligh* or silver integer, which was the Rupee. And hence the revenue of Akbar in his 39th and 40th years was about ten krors of Rupees.

If not, and we are to take the *murādi tankah* to mean merely the coin so called, of which (as we learn from the *Ain*) five went to the *dām* and two hundred to the Rupee, then Mr. Rodgers would be nearer right. The *tanka* figured by Mr. Rodgers weighs 59 grains, that mentioned by Nizam-ud-din (which is however differently spelt) would only be half the sixty-fourth (say 50 grains). If these could be taken to coincide, the revenue aggregate given by the latter would have to be halved also. In that case the word "Hindustan" would have to be taken in a more restricted sense, as meaning nothing but the *Subahs* of Allahabad, Agra, Delhi and Bengal, aggregated by 'Abul Fazl at three *krors* and forty-three *lākhs*. And this, which is the only alternative solution, is equally destructive with the former of Mr. Thomas' excessive estimate, which he attempts to support by doing violence to Abul Fazl's words and figures. Before adopting it however, we must attentively study the text of Nizam-ud-din, and I believe it will be found impossible to suppose that the geographical area of Hindustan could have been intended to be thus restricted. For we are there told that Hindustan measures 1680 *kos* from the Hindu Kush to the Bay of Bengal and 800 from Kashmir to Baroch: and so measured Hindustan will be found to comprise the whole twelve *Subahs* of Abul Fazl, assessed, as we learn from his details, at nearly ten krors of Rupees, as well as Khandes and Guzrat, whose assessment is more doubtful.

I therefore see no escape from the conclusion that ten *krors* is the right figure ; that the estimates of Nizam-ud-din and Abul Fazl agree ; and that the *murādi tankah* is neither the one-fifth of a *dām* mentioned in the *Ain* nor the modern “double pyce,” but an imaginary integer of copper accounts where ~~one~~ ^{forty} ~~four~~ equal one silver Rupee. I conclude, farther, that this sum was increased, by the end of the reign, to about twelve *krors*; that increase being due to good settlements and a firm administration. Of course my conclusion is wholly inconsistent with the complaint of Sir R. Temple (*India in 1880*) that the British get no more out of the empire than the Mughals did. But that is a complaint which would, as I imagine, be endorsed by very few persons who were acquainted with the facts.

*On the Identity of Upello with Upaplava.—By RISHI KESH
BHATTĀCHĀRYA SHĀSTRĪ.*

With reference to a letter which was sent a few days ago by the Deputy Commissioner, Delhi, asking about the site of the city of Upello or (the correct word) Upaplava mentioned in the Virāṭaparva, Mahābhārata, I beg to submit the following which I hope may throw some light on the subject.

As Sanskrit literature is wholly destitute of trustworthy geographical records, it is not easy, after the lapse of ages, to ascertain precisely the site of several places enumerated in the Purāṇas. A skilful conjecture only may be made by way of solving the problems of such a nature.

The śloka referred to in the letter is :—

उपप्लवं समागत्य खन्धावारं प्रविश्य च ।
पाण्डवानश्च तान् सर्वान् मत्स्यक्षत्र ददर्श च ॥

“Śalya having arrived at Upaplava entered the camp and saw there all the Pāṇḍavas.”

Nilakanṭha in his commentary on this śloka says—उपप्लवं विराटनगरम् प्रदेशविशेषम् “Upaplava is a city in the kingdom of Virāṭa” (Matsyadeśa). So the solution of the question solely depends on finding out the site of Matsyadeśa or the kingdom of Virāṭa, a task which is as difficult as may be expected at a time like this when all the geographical names of ancient India have assumed quite different forms.

However, we must try to trace the place by collecting local traditions as well as Paurāṇika descriptions relating to the subject.

It is a common saying among the people of Midanapur district in Bengal that, the Matsyadeśa of ancient times had been situated in the vicinity of that district, while others state that the kingdom of Virāṭa had

been situate near the Maldah district in Northern Bengal; and both parties show some ruins to verify their respective theories.*

I found the other day in a Bengali Map of India by a Ganeśachandra Bhaṭṭachārjya that Berar of the present time was marked as the kingdom of Virāṭa of the Mahābhārata. According to the Prākṛita Grāmamāṅgon by Virāṭa in Sanskrit might be reduced to the form of Birāḍa in the Prākṛita; hence Birāra or Berar in the vernaculars. So this last supposition has a strong etymological ground to support it.

The traditions and hypotheses cited above are apparently of such a contradictory nature that from them not much light can be derived. So leaving them aside for a moment, let us search in the Mahābhārata after the districts bordering on Matsyadeśa.

We find in the Digvijaya Parvādhyāya, of Sabhāparva, Mahābhārata :—

विजित्वात्मेन कालेन दशार्णानजयत् प्रभुः ।
तत्र दशार्णको राजा सुधर्मा लोमहर्षणम् ।
छतवान् भीमसेनेन सहद् युद्धं निरायुधम् ।
युध्यमानं बलान् सङ्गे विजिग्ये पाण्डवर्षभः ।
ततो मत्स्यान् महातेजा मलदांश्च महाबलान् ॥

“That Bhima on his way to conquer the eastern countries, having subdued many countries, in a short time came to Daśārṇa, where Sudharmā the king of the place fought a dreadful battle, but Bhima gained the field. After completing the conquest of this country, the very powerful Bhima subdued the inhabitants of Matsya and Malada respectively.”

It is manifest from the above that the Matsyadeśa of Mahābhārata had Daśārṇa on one side and Malada on the other. But this, instead of solving the problem, leads us to a greater confusion. Now the question arises where was Daśārṇa situated, and where Malada? On the reply to this depends our solution, but this is not an easy task.

Mr. Wilson, in his commentary on the 24th śloka of Meghadūta recites the following in respect of Daśārṇa :

“No traces of this name are to be found in modern maps. It is enumerated in Major Wilford’s lists from the Purāṇas, Asiatic Researches, Vol. VIII, amongst the countries situated behind the Vindhya mountains and corresponds according to him with Daseréne of Ptolemy’s. * * * * It may possibly correspond, at least in part, with the modern district of Chattisgarh,

* [This is a mistake, according to Dr. R. Mitra, who thinks “that Paṇḍit must have confounded Midnapur with Dinajpur which has often been described as the Virāṭa of the Mahābhārata.” See *Proceedings, A. S. B.*, August 1880. On the identification of Virāṭa, see General Cunningham’s *Ancient Geography of India*, vol. I, p. 350. Ed.]

as the etymology of both words refers to similar circumstances, Chattisgarh being so named from its being supposed to comprise thirty-six forts. According to Bharata the commentator on our text, Daśārṇa is derived from Daśa ten and Ṛṇa a stronghold or Durga of the Peninsula and hence ~~the~~ district of the ten citadels."

If we rely on the above a part of the question is solved. Let us now look after Malada.

In his commentary on the 15th śloka of Meghadūta in which a term *Mala* occurred, Mr. Wilson observes that "the easterly progress of the cloud and the subsequent direction by which he is to reach the mountain *Aṃra-cūta*, prove that the place here mentioned must be somewhere in the immediate vicinity of Ruttanpore, the chief town of the northern half of the province of Chattisgarh and described in Captain Blunt's tour, Asiatic Researches, Vol. II, the only modern traces that can be found of it are in a place called Malda, a little to the north of Ruttanpore; in Ptolemy's map there is a town called Maleta and situated with respect to the Vindya mountains similarly with the Mala of our poet."

Many places may be found in the map of India under the name of Mala or Malwa. A term which according to the Prākṛita Grammar may be supposed to have been derived from the Sanskrit Malada. Mr. Wilford in his lists from the Purāṇas has applied this name to the Malabhoom of Midanapur, Bengal, while according to Pliny Malas are the countries of the Mali of the Punjab, a tribe who are described to have fought a dreadful battle with Alexander the Great. Besides these, a district of the same name, as we have already mentioned, is still to be found in northern Bengal.

This being the case, nothing can be precisely determined by merely saying that Matsyadeśa was situated between Daśārṇa and Malada; for we cannot ascertain which of the above mentioned places is meant here. (1) If Malabhoom of Midanapur be taken for it, the first tradition may be deemed acceptable. (2) If Maldah of Bengal be considered to have been the Malada of the text, it would furnish a strong argument in support of the second. (3) If we concur with Mr. Wilson, the place so described in the Bengali map might be considered as possibly a correct one. So the solution still is enveloped in hopeless confusion.

Let us adopt another way which may lead us to the correct place.

Manu in his division of India states:—

“सरस्वतीद्विपद्मोद्भवोद्भवोद्भवः ।
तं देवनिर्मितं देशं ब्रह्मावर्णं प्रचक्षते ॥
कुवचेन च मत्स्याश्च पाञ्चालाः शूरसेनकाः ।
एष ब्रह्मर्षिदेशो वै ब्रह्मावर्णोद्भवः ॥”

"The sacred place lying between the two divine rivers Saraswatī and Drishadwatī (Gagra) is called Brahmāvarta, and next to Brahmāvarta is Brahmarshideṣa, a place consisting of Kurukshetra, Matsya, Pāñchāla, and Śūrasenaka."

Kullūkabhaṭṭa, in his commentary on the last śloka, says "सह्येकं कृदा बहुवचनान्ता देशविशेषवाचकाः—पाञ्चालाः कान्यकुब्जदेशाः शूरसेनका मथुरादेशाः" "The words Matsya &c., when used as plural, denote the countries of the same names. Pāñchāla is the name of Kānyakubjadeṣa and Śūrasena of Mathurā."

It would be out of place here to discuss whether Pāñchāla and Kānyakubja are two different names of the same place. Yet it may be safely inferred that even at the time of *Kullūkabhaṭṭa* the names of the places mentioned in the old books must have become obsolete, otherwise Kullukabhaṭṭa would have pointed out the modern name of Matsya. Nevertheless it is evident from the above mentioned passage of Manu that Matsya Deṣa was situate next to Kurukshetra in the Ambala district and was probably on the south-east of it.

Again we find in Virāṭaparva, Mahābhārata—the way of the Paṇḍavas from Kāmyavana—a forest extending on the banks of the Saraswatī—to Matsyadeṣa is described as follows :—

"उत्तरेण दशार्णाले पाञ्चालान् दक्षिणेन च ।
अन्तरेण यज्ञोत्तमान् शूरसेनांश्च पाण्डवाः ।
लुब्धा द्रुवाणा मत्स्यस्य विषयं प्राविशन् वनान् ॥"

"Pāṇḍavas calling themselves hunters and going straight by north of Daśārṇa, south of Pāñchāla and through Yakrilloma and Śūrasena reached the kingdom of Matsya." From this passage we may easily infer that Matsyadeṣa must have been situate on the north-west of Śūrasena (modern Mathurā), a place nearly corresponding with that of Manu.

Moreover it is mentioned in the Gograhaparvādhāya, Virāṭaparva of the Mahābhārata, that Matsyadeṣa was situated on the south-east of Hastinapur, then the capital of India, and was at a distance of two days' journey from it, thus :—

"ते तु गत्वा यथोदिष्टां दिशं वक्त्रेर्नदीपते ।
सन्नद्धा रथिनः सर्व्वे सपादाता बलौत्कराः ।
प्रतिवैरं चिकीर्षन्तो गोषु गृह्णा सहाव्रताः ।
अपरे दिवसे सर्व्वे राजन् सन्धूय कौरवाः ।
अष्टम्यां ते न्यगृह्णन्तो गोकुलानि सहस्रशः ॥"

A place called Hathnapore in the Mirut district is supposed to be the Hastinapore of the Mahābhārata. This supposition also, if correct, supports our point. On the whole we may be satisfied that Matsyadeṣa must have

been situated between Mathurá and Delhi, and consequently the Paṇḍits who claim that Upello on the Delhi and Agra road was the Upaplava of ancient times may be quite correct.

regards Daśārṇa, although we have not any strong argument on our side. Mr. Wilson, yet we may freely urge that there was a Daśārṇa in the north-western Provinces; for a river of the same name is still to be found in the Ĥamirpur district, North-West Provinces.

With respect to Malada it is true that no definite trace of it is to be found now. Nevertheless we must consider it to have been situate in the North-Western Provinces. There is a place in the Delhi district called Malwa, from which a large quantity of oil is exported to various provinces of Hindustan. I may throw out the suggestion that this Malwa may be the Malada of the Mahábhārata. If this be the case we have got a consistent theory which may be provisionally accepted as true until some better one be found in its place.

Translations from the Ĥamúseh.—By C. J. LYALL, C. S.

In the Journal of the Asiatic Society of Bengal for 1877 I published some translations of old Arabian poetry, chiefly from the *Ĥamúseh*, and the following are offered in continuation of those. Somewhat more exactness of metrical form has now been aimed at in the English versions, but I hope that accuracy has not been allowed thereby to suffer. The majority of the poems have been translated in Arabian metres, a full explanation of each of which will be found where it occurs. A critic in the *Academy*, noticing the previous series, has called in question the possibility of giving in the English language any idea of Arab metres, or at least the adequacy of the attempt made in that series. On that occasion, however, I aimed (with one exception) at no exact reproduction in English of the order and quantity of the syllables in the Arabic originals: only a general likeness was intended; and that likeness seemed to me to be sufficiently secured. I may mention that I have carefully studied M. Stanislas Guyard's *Théorie Nouvelle de la Métrique Arabe*, and that any discrepancy which may be detected between his views on the Arabian metres and mine is not due to my ignorance of the former. The four metres which I have imitated in the translations are the *Tawíl*, the *Ĥezej*, the *Kámil*, and the *Wáfir* (the last exactly only in one poem, No. III: in Nos. XV and XXII only the general scheme is followed).

As regards the last three, I believe that there is little or no difference between M. Guyard and myself. As regards the *Tawil*, I am as yet quite unable to accept his theory of the value of the foot *fa'ulun*, which he considers presents a double ictus, like *maf'ulun*. This is not the place to argue the question; but all the phenomena alleged by Guyard in support of his view appear to me to bear an interpretation consistent with that taken by me, while there is much besides that confirms me in my opinion.

The poems here rendered belong to all the periods of which specimens are given in the *Hamdseh*, from the oldest days of the War of Basûs down to the time immediately preceding that in which the collection was compiled. The majority are, however, ancient. The probable dates have been given when I could ascertain them; but it will of course be understood that those put forward by Causin de Perceval for pre-islamic times are for the most part conjectural, and at the best only approximate. The references to the pages of the *Hamdseh* are to Freytag's edition of the Arabic text, with et-Tebrîzî's commentary.

I.

قال الفغد الزماني في حرب البسوس
 صَحَحْنَا عَنْ بَنِي هِنْدٍ وَقَلَدْنَا الْقَوْمَ إِخْوَانُ
 عَسَى الْيَّامُ أَنْ يَرْجِعَ قَوْمًا كَالَّذِي كَانُوا
 فَلَمَّا صَرَحَ الشَّرُّ فَأَمْسَى وَهُوَ عُرْيَانُ
 وَلَمْ يَبْقَ سِوَى الْعُدَا نِ دَنَاهُمْ كَمَا دَانُوا
 مَشِينًا مَشِيَّةَ اللَّيْلِ غَدَا وَاللَّيْلُ غَضْبَانُ
 بَضْرِبٍ فِيهِ تَوْهِيْسٌ وَتَخْضِيْعٌ وَإِقْرَانُ
 وَطَعْنٌ كَفَمِ الزَّقِّ غَدَا وَالزَّقُّ مَلْنُ
 وَبَعْضُ الْحَلَمِ عِنْدَ الْجَهْلِ لِلدَّلَّةِ إِذْعَانُ
 وَفِي الشَّرِّ نَجَاةٌ حَيْثُ لَا يَنْجِيكَ إِحْسَانُ

El-Find ez-Zimmânî.

Forgiveness had we for Hind's sons : *
 We said : ' The men our brothers are :
 The Days may bring that yet again
 they be the folk that once they were.'
 But when the Ill stood clear and plain,
 and naked Wrong was bare to day,
 And nought was left but bitter Hate—
 we paid them in the coin they gave.
 5 We strode as stalks a lion forth
 at dawn, a lion angry-eyed ;
 Blows rained we, dealing shame on shame,
 and humbling pomp and quelling pride :
 Spear-thrusts wherefrom the spouting blood
 gushed forth as wine from full wine-skin.
 Too kind a man may be with fools,
 and move them but to flout him more ;
 And Mischief oft may bring thee peace,
 when Mildness works not Folly's cure.

Hamâsch, pp. 8—12.

NOTES.

The metre of this poem is *Hezj* of the first form :—

◡ — — ◡ | ◡ — — ◡ || ◡ — — ◡ | ◡ — — —

The English endeavours to reproduce it as far as the metrical structure of our language will permit.

The author's real name was Shahl son of Sheybân : his surname, *el-Find*, means "the mountain crag" or "a mighty piece of a mountain." Accounts differ as to the reason why it was given ; some say he was so called because of the hugeness of his stature : others, that he said on a day of battle to his fellows who were pressed hard—"Plant yourselves against me : I will be a rock to your backs."

The Benû Zimmân, to which tribe he belonged, were of the offspring of Bekr, son of Wâil, and dwelt in the central mountains of Nejd among the Benû Hanifeh. They, like their friends of Hanifeh, long held aloof from the War of Basûs (one of the greatest of the ante-Islamic struggles between the Arab tribes), which was at first confined to the divisions of Bekr descended from Duhl son of Sheybân on the one side, and Teghlib

on the other. For many years Sheybân was worsted in the contest with Teghlib, and at last the former sought the aid of el-Ḥārith son of 'Obād, chief of Ḥanifeh, in bringing about a peace. El-Ḥārith sent his son (some say, nephew) Bujeyr to the men of Teghlib to treat for a ~~corol~~ ^{corol} ^{mise}. The young man was, however, slain by Muhelhil, the leader of Teghlib, in despite of his character of peacemaker; and from that time el-Ḥārith and his tribe were arrayed with their brethren of Bekr against Teghlib. The latter soon found that fortune had turned; and the struggle ended, after forty years of strife, in a hollow peace and the emigration of Teghlib to the uplands of el-'Irāq.

The War of Basûs is a great centre of old Arab song and story. It is also one of the oldest well-vouched-for historical events of the Days of the Ignorance. Caussin de Perceval places its commencement, the slaying of Kuleyb, in 494 A. D., and the death of Bujeyr and the taking part in the war of el-Ḥārith son of 'Obād in the following year, 495; but this seems to me an error. Several battles are named in which Teghlib was victorious, before the disastrous Day of Qiddāh, "the Day of the shaving of the love-locks," *Tihlāq el-limem*, when they were beaten with great slaughter by el-Ḥārith; and I think we must allow at least five years between the outbreak of the war and this event.

The poem above given is connected by tradition with the War of Basûs, and it was most probably composed when the men of Ḥanifeh were, by the treacherous murder of Bujeyr, drawn into the strife of Bekr with Teghlib. This would fix its date as about the end of the 5th century after Christ.

v. 1. "Hind's sons." This is the better reading: the text of Freytag gives "sons of Ḍuhl;" but no contest of Ḥanifeh with Ḍuhl is recorded: certainly not during the War of Basûs. Hind is the reading given as an alternative in the notes, and that found in the *Kitāb el-Aghânî*, xx, 143. This Hind was the mother of Teghlib, herself the daughter of Murr son of Udd, and sister of 'Temîm.

The first two couplets of the poem have been somewhat inappropriately quoted by more than one writer on old Arab legend as a proverbial example of brotherly endurance of injury. They are but the prelude to a stern administration of chastisement.

v. 6. The exact meaning of *igrân* is difficult to ascertain: of its general sense there can be no doubt. Literally it should be "a yoking together"; and it seems probable that it refers to the taming of an unruly camel, which is tied to a stronger one that is tame, and so brought under control. Thus 'Amr son of Kulthûm says in his Mo'allaqah (v. 66):—

matâ na'qid qarînatand (better, *to'qad qarînatund*) *bîḥablin*
tejudda-l-ḥabla 'au teqîṣi-l-qarînd.

that is

“When we bind our unruly camel to another with a cord [to tame her] (or, as I prefer to read :

{hen our unruly camel is bound to another with a cord,”

{She snaps the cord or breaks her fellow's neck.”

The meaning of this couplet is illustrated by an anecdote told of ‘Amr son of Kulthûm in the Aghânî (ix. 183), on the authority of Ibn-el-A‘râbi : “‘Amr son of Kulthûm of Teghlîb led a foray against the men of Temîm : then he swept down upon a tribe of Qeys son of Tha‘lebeh, and filled his hands with their goods, and took prisoners and captives. Then he ended that expedition in el-Yemâmeh where the Benû Hanîfeh dwelt, among whom were certain men of ‘Ijl. But the men of Hâjr heard of his coming, and the first who went forth to meet him of Hanîfeh were the Benû Lujeym, with Yezîd son of ‘Amr son of Shemir at their head. This chief, when he saw the son of Kulthûm, set his lance at him, pierced him, and cast him to ground from his horse : for Yezîd was a mighty man, huge of bulk. And he bound him with bonds of leather, and said to him—‘Art thou not he that saith—

“When our unruly camel is bound to another with a cord,

she snaps the cord or breaks her fellow's neck” ?

Lo ! I will yoke thee (*sa’ugrinuka*) to this camel of mine, and drive the pair of you together side by side.’ Then cried ‘Amr, ‘Help, men of Rabi‘ah ! Like shall be paid for like !’* And the men of Lujeym gathered together and besought Yezîd not to do as he said ; but he had never really purposed it. And he carried ‘Amr with him to one of their castles in Hâjr, where he pitched a tent for him, and slew beasts to feast him, and clad him in rich clothing, and gave him a goodly she-camel to ride, and poured for him wine to drink.” &c.

From all of which it follows that *qarîneh* means a camel which is yoked to another (*qarîn*) to cure her stubbornness, and that *agrana* is used for the action of yoking a *qarîneh* to a *qarîn* ; which justifies my rendering, “quelling pride,” and explains how *igrân* comes to mean, as et-Tebrîzî says it does, *ghalbeh*, “overcoming.”

II.

قال عروة بن الورد العبسي

لَمَّا لَلَّهْ صُعُورًا إِذَا جَنَّ لَيْلُهُ مُصَافِي الْمَشَاشِ أَلِفًا كُلَّ مَجْزَرٍ
يَعُدُّ الْغَنَى مِنْ نَفْسِهِ كُلَّ لَيْلَةٍ أَصَابَ قَرَاهَا مِنْ صَدِيقٍ مُهَسَّرٍ

* So I render *Yâ la-Rabi‘ah ! ‘amthiletan !* *Amthileh* is pl. of *mithâl*.

يُنَامُ عِشَاءً ثُمَّ يُصْبِحُ نَاعِشًا	يُحْتِ الْخَصَا عَنْ جَنْبِهِ الْمُتَعَبِرِ
يُعِينُ نِسَاءَ الْحَيِّ مَا يَسْتَعِينُهُ	وَيُمِئِي طَلِيحًا كَالْبَعِيرِ الْمُحْمَرِ
وَإَكْنَ مَعْلُوكًا صَفِيحَةً وَجْهِهِ	كَضَرْءِ شَهَابٍ الْقَابِسِ الْمُتَذَوِّرِ
مُطَلًّا عَلَى أَعْدَائِهِ يَزْجُرُونَهُ	بِسَاحَتِهِمْ زَجَرَ الْمَنِيحِ الْمُشَهَرِ
إِذَا بَعُدُوا لَا يَأْمَنُونَ اقْتِرَابَهُ	تَشُوفُ أَهْلَ الْغَائِبِ الْمُتَنْظَرِ
فَذَلِكَ إِنْ بَلَغَ الْمَنِيَّةَ يَلْقَاهَا	حَمِيدًا وَإِنْ يَسْتَعْنِ يَوْمًا فَاجْدِرِ

'Orweh son of el-Ward of 'Abs.

God's scorn on the homeless wight who under the pall of Night
goes cowering the shambles through, and gathers the marrow-
bones ;

Who comforts his heart, full rich, as oft as at eventide
he lights on a wealthy friend to yield him his fill of milk !

He lies in the twilight down, and drowsy the morrow wakes,
and shakes from his dust-spread side the gravel where he has
lain.

A help to the women-folk in all that they bid him do,
at even he jaded lies like camel outstretched to die.

5 So he : but the homeless wight the breadth of whose valiant face
glows bright as a mighty flame that shines through the mid-
night mirk,

A terror to all he hates, besetting their way with fear,
while home-bound they curse him deep, as losers the luckless
shaft :

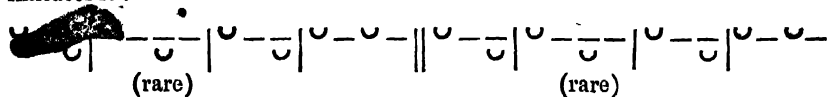
Though far from his haunts they dwell, they image his coming
nigh,

and watch, as his kinsmen watch when one whom they love
comes home :

Yea, he, if he lights on Death in faring his way, a death
of glory it is ; and if on Riches one day, how due !

NOTES.

The metre is the most ordinary form of the *Tawfīl*; the English imitates it:—



'Orweh son of el-Ward was a warrior and singer of 'Abs in the long war which that tribe waged against Ḍubyān called the War of Dāḥis, A. D. 568—608 (C. de Perceval). He was a proverb for his generosity, and it was said of him by one of the early Khalifehs—"He who calls Ḥātim the most generous of the Arabs wrongs 'Orweh." His very name implies his character: for '*orweh*' means those trees and bushes fit for pasture which do not dry up in seasons of drought, and are therefore a resource in times of dearth. He was called '*Orwat-es-Ṣa'ālik*," "The resource in time of hunger of all vagabonds," because he never failed to give them of his store, or to find food for them by plundering others. Much of his poetry has survived and has been edited and published by Prof. Noeldeke.

Such a vagabond as 'Orweh delighted to help, and such an one as he despised, are here set before us by himself. These *Ṣa'ālik*, outlaws, homeless men, were numerous in the days of the Ignorance. Ta'abbāṭa Sherrā was such an one: such were es-Suleyk son of es-Sulakch and esh-Shenfarā of Azd. They were men who had on them the guilt of blood and had been disowned by their tribe. All men's hands were against them, and they alone against all. What hardness and heroic strength of heart this solitude bred are nowhere so strikingly seen as in that most magnificent of old Arab poems, the *Lāmiyyeh* of esh-Shenfarā.

v. 1. "God's scorn be on him," literally, "may God smite him on the cheek" and so disgrace him.

The word *muṣāḍḍi* in this line is difficult, both to parse and render: for the discussion of it the reader is referred to et-Tebrizi and Freytag's notes. I have taken it in the sense of "gathering up out of the dust and cleaning," but with some diffidence. There is a various reading for it—*maḍāḍi*: "who goes after, or in search of:" but this has the aspect of a device to smoothe a difficulty, and is frigid.

v. 2. "His fill of milk:" that "milk" is intended by the "entertainment," *qirā*, spoken of, I infer from the meaning of *muyessir*, which denotes "one whose herds and flocks yield him abundance of milk."

v. 3. He goes to rest early and rises late, still drowsy.

v. 6. "As losers curse the luckless shaft": *zejra-l-menīḥi-l-mushah-heri*; *gl-menīḥ* was the name of one of the three arrows which, in the game played with ten arrows by the pagan Arabs, had no lots assigned to them.

Seven of the ten were winning arrows, and three, *el-menih*, *es-sefih*, *el-weghid*, losing. *El-menih* may also mean *lent*: but it is unnecessary to take it in that sense here.

v. 7. "Watch:" *teshawwuf* means straining the gaze in looking for a distant object.

III.

قال ابو الغول الطهوي

فَدَّتْ نَفْسِي وَمَا مَلَكَتْ يَمِينِي	فَوَارِسَ مَدَدَتْ فِيهِمْ ظُنُونِي
فَوَارِسَ لَا يَمْلُونَ الْمَنَائِبَا	إِذَا دَارَتْ رَحَا الْحَرْبِ الزَّبُونِ
وَلَا يَجْزُونَ مِنْ حَسَنِ بَسِيٍّ	وَلَا يَجْزُونَ مِنْ غِلَظِ بَلِيٍّ
وَلَا تَبْلِي بَسَالَتِهِمْ وَإِنَّهُمْ	صَلُّوا بِالْحَرْبِ حِينًا بَعْدَ حِينِ
هُم مَنَعُوا حِمِي الرِّقْبِي بِصُوبِ	يُؤْلَفُ بَيْنَ أَشْتَاتِ الْمَنُونِ
فَمَكَّبَ عَنْهُمْ دَرَّةَ الْأَعَادِي	وَدَاوَا بِالْجُنُونِ مِنَ الْجُنُونِ
وَلَا يَرْعَوْنَ أَكْنَافَ الْهُيُونَا	إِذَا حَلُّوا وَلَا أَرْضَ الْهُدُونِ

Abu-l-Ghāl et-Tuhawī.

My life and my wealth, yea all that is mine, be ransom
against Time's wrong for those who shewed true my forecast !

The knights who are weary never before Death's onset,
though stubbornest Strife ply there the dread Mill of Battle.

Men they who requite not good with an evil guerdon,
nor do they return for roughness a gentle answer.

Their sternness abides unflagging, though they be roasted
again and again in War's most flaming furnace.

5 They held with the sword el-Waqbū's guarded meadow,
—the sword from whose edge flew all Death's shapes united ;

It drave from before them headlong the rush of foemen,
and madness at last was healed by a wilder fury.

Not men they to feed their flocks on the skirts of Quiet :
not they to pitch tent, whereso they abide, in meekness !

kinsmen to all the men of Temīm settled round about, to the Bel-'Ambar, to the Benû Yerbû' ibn Ḥanḍaleh, and to the Benû Mâzin ibn Mâlik, asking help against Bekr. How these men fared among their kinsmen, who helped them and who hung back, is told at great length, but were tedious to relate here. In the end the men of Mâzin rode forth to Bekr, and overcame them, and recovered el-Waqbâ for their tribe, who still held it in the days of the geographer Abû 'Obeyd el-Bekrî, who died A. H. 487. And this deed of Mâzin is the subject of the poem.

Abu-l-Ghûl et-Tuhawî, the author, is so called because he was descended from Tuheyyeh, daughter of 'Abd-Shems son of Sa'd son of Zeyd-Menâh. This woman had three sons, 'Auf, Abû Sûd, and Jusheysh, by Mâlik son of Ḥanḍaleh; and the posterity of these were known by their mother's name, not their father's: a very rare thing in Arabian genealogies.

v. 1. "May my life be thy ransom!" is a phrase which recurs constantly in Arab verse. Like expressions are—"May my father and mother be thy ransom," "May I be thy sacrifice!" &c. The idea of *fidâ* is, of course, that the person devoting himself takes upon him all the evil in the destiny of the other whom he addresses. Hence the common expression, heard every day in India, *fidwî* (properly *fidawî*).

v. 2. "The Mill of Battle": a frequent comparison in old Arab poetry; the *locus classicus* is in the Mo'allaqah of 'Amr son of Kulthûm, vv. 30, 31:—

matâ nenqul 'ilâ qaumin raḥânâ
yekûnû fî-l-liqâ'i lahâ ṭaḥînâ.
yekûnu thifâluḥâ sharqiyya Nejdin
wuluhwatuhâ Quḍâ'atu 'ajma'inâ

"When our war-mill is set against a people,
 as grain they fall thereunder ground to powder.
 "Eastward in Nejd is set the skin thereunder,
 and the grain cast therein is all Quḍâ'ah."

"Stubbornest strife": the word *zabân* signifies thrusting, pushing, straining one against another.

v. 4. "Roasted"—*ṣalû bil-ḥarbi*. This, again, is one of the commonest phrases for War: as in the words of el-Ḥārith son of 'Obâd (for the incident, see the notes to No. 1):—

lam 'akun min junâtiḥâ, 'alima-l-lâ-
hu, wa'innâ biḥarriḥa-l-yauma ṣallî.

"I was not of those whose wrong wrought it, God knows!
 yet must I today be burned in its blaze."

v. 5. "All Death's forms": *ashtât-el-manâni*. The best way to take the phrase is, I think, to understand the various strokes by which death can be dealt with a sword: as shearing off the head, cleaving the skull, &c.

IV.

قال ابراهيم بن كذيف النبهاني

تَعَزَّ فَإِنَّ الصَّبْرَ بِالْحَرِّ أَجْمَلُ	وَلَيْسَ عَلَيَّ رَيْبَ الزَّمَانِ مُعَوَّلُ
فَلَوْ كَانَ يُغْنِي أَنْ يُرَى الْمَرْجُومُ	لِحَادِثَةِ أَرْكَانٍ يُغْنِي التَّدَلُّ
لَكَانَ التَّعَزِّيَ عِنْدَ كُلِّ مُصِيبَةٍ	وَنَائِبَةٍ بِالْحَرِّ أَوْلَى وَأَجْمَلُ
فَكَيْفَ وَكُلِّ لَيْسَ يَعْدُو حِمَامُهُ	وَمَا لِمَرْبِي عَمَّا قَضَى اللَّهُ مَزْحَلُ
ه فَإِنْ تَكُنِ الْإِيَّامُ فِينَا تَبَدَّلَتْ	بِبُوسِي وَنُعْمِي وَالْخَوَادِثُ تَفْعَلُ
فَمَا لَيْفَتْ مِنَّا قَنَاءٌ صَلِيبَةٌ	وَلَا ذَلَّلْنَا لِلَّتِي لَيْسَ نَجْمَلُ
وَلَا كُنْ رَحَلْنَاهَا نَفْسًا كَرِيمَةً	نَحْمَلُ مَا لَا يُسْتَطَاعُ فَتَحْمَلُ
وَقَيْنَا بِحُسْنِ الصَّبْرِ مِنَّا نَفْسَنَا	فَصَحَّتْ لَنَا الْأَعْرَاضُ وَالنَّاسُ هَزَلُ

Ibrâhîm son of Kuneyf en-Nebhânî.

Be patient : for free-born men to bear is the fairest thing,
and refuge against Time's wrong or help from his hurt is none.
And if it availed man aught to bow him to fluttering Fear,
or if he could ward off hurt by humbling himself to Ill,
To bear with a valiant front the full brunt of every stroke
and onset of Fate were still the fairest and best of things.
But how much the more, when none outruns by a span his Doom,
and refuge from God's decree nor was nor will ever be.

5 And sooth, if the changing Days have wrought us—their wonted way—

a lot mixed of weal and woe, yet one thing they could not do :
They have not made soft or weak the stock of our sturdy spear :
* they have not abased our hearts to doing of deeds of shame.

We offer to bear their weight a handful of noble souls :

though laden beyond all might of man, they uplift the load.

So shield we with Patience fair our souls from the stroke of
Shame :

our honours are whole and sound, though others be lean enow.

Ham. pp. 125-6.

NOTES.

The metre is the same as that of, No. II.

I have been able to ascertain nothing regarding the author ; from his name, Ibrāhīm, he was doubtless born after the promulgation of el-Islām. His tribe, Nebhān, was one of the divisions of Tayyi'. The sentiment of vv. 5—8 seems to shew that the poem belongs to the first days of the new faith. The stress laid on the word *horr*, "free born," in vv. 1 and 3 is also consonant with that age, when the Arabs were being thrust into the background by the invasion of all important posts, civil and military, by *mawālī*, "freedmen" of foreign birth.

v. 6. "The stock of our sturdy spear": *qanātun ṣalībatan*. The spear is here not the actual weapon, but the stubbornness and strength of backbone of the clan. Examples of the metaphor abound ; the following is found in the Mo'allaqah of 'Amr son of Kulthūn (vv. 57—59) :—

fa'īna qanātun, yā 'Amru, 'a'yet
'ala-l-'a'dā'i qablaka 'an telīnā :
'idā 'aḍḍa-th-thiqāfu biha, -shmu'azzet
wa-wellet-hā 'ashauzanatan zabūnā—
'ashauzanatan : 'idā-nqalubet, 'arannet
teshujju qafa-l-muthaqqifi wa-l-jebīnā.

"In sooth our spear, o'Amr, has outworn too many a hand
that strove against it before thee, that it should be soft to thee !

"When the straightening-iron clipped it, it stiffened itself against it,
and turned it back upon the the wielder thereof, stubborn and
sturdy :

"Yea, stubborn : when it was bent to mould it, it cried out,
and wounded the neck and forehead of the straightener."

The phrases "the spear of such an one is hard," or "there is weakness in their spear," are almost commonplaces. Et-'Tebrizī quotes—

kānet qanātī lā telīnu lighāmizin ;
fa'alānaha-l-'aṣbāḥu wa-l-'amsd'u.

“Time was when my spear yielded to none that tried its strength ;
but softness has come upon it from the Dawns and the Setting Suns :”
i. e., the passing of the days.

V.

قال دريد بن الصمة

نَصَحْتُ لِعَارِضٍ وَأَصْحَابِ عَارِضٍ
فَقُلْتُ لَهُمْ ظَنُّوا بِالْقَتْلِ مَدَجَجٍ
فَلَمَّا عَصَوْنِي كَذَبْتُ مِنْهُمْ وَقَدْ أَرَى
وَهْلًا أَنَا إِلَّا مِنْ غَزِيَّةٍ إِنْ غَوَتْ
أَمَرْتُهُمْ أَمْرِي بِمَنْعَرَجِ اللَّوِيِّ
تَنَادَوْا فَقَالُوا أَرَدْتَ الْخَيْلُ فَارِسًا
فُجِئْتُ إِلَيْهِ وَالرَّيْحَانُ تَفْشُهُ
وَكُنْتُ كَذَاتِ الْبُورِ بَعِثْتُ فَأَذْبَلْتُ
فَطَاعَنَتْ عَنْهُ الْخَيْلُ حَتَّى تَنَفَّسَتْ
١٠ قَتَلَ امْرِئٌ أَسَى أَخَاهُ بِنَفْسِهِ
فَإِنْ يَكُ عَبْدُ اللَّهِ خَلَى مَكَانَهُ
كَمِيشُ الْإِزَارِ خَارِجُ نِصْفِ سَاقِهِ
قَلِيلُ التَّشْكِ لِلْمُصِيبَاتِ حَافِظُ
قَرَاهُ جَمِيعُ الْبَطْنِ وَالزَّادُ حَاضِرُ
١٥ وَإِنْ مَسَّهُ الْبِقَوَاءُ وَالْجَهْدُ زَادَهُ

وَرَهْطُ بَنِي السُّودَاءِ وَالْقَوْمِ شَهْدِي
سَرَاتِهِمْ فِي الْفَارِسِيِّ الْمَسْرُودِ
غَوَايِدُهُمْ وَأَنْزِي غَيْرَ مَهْدِي
غَوِيَّتْ وَإِنْ تَرَشَّدَ غَزِيَّةٌ أُرْشِدِ
فَلَمْ يَسْتَبِينُوا الرُّشْدَ إِلَّا ضَحَى الْغَدِ
فَقُلْتُ أَعْبُدُوا اللَّهَ ذَلِكُمْ الرَّدِي
كَوَقَعَ الصِّيَاصِي فِي النَّسِيجِ الْمَمْدَدِ
إِلَى جِلْدٍ مِنْ مَسْكٍ سَقَبَ مُقَدَّدِ
وَحَتَّى عَلَانِي حَالِكُ اللَّوْنِ أَسْوَدِي
وَيَعْلَمُ أَنَّ الْمَرْءَ غَيْرُ مُخْلَدِ
فَمَا كَانَ وَقَانًا وَلَا طَائِشَ الْيَدِ
بَعِيدٍ مِنَ الْآفَاتِ طَلَعَ أَنْجَدِ
مِنْ الْيَوْمِ أَعْقَابُ الْأَحَادِيثِ فِي غَدِ
عَنِيدٌ وَيَعْدُو فِي الْقَيْمِصِ الْمَقْدَدِ
سَمَاحًا وَإِلْفًا لِمَا كَانَ فِي الْيَدِ

صَبَامًا مَبَاحَتِي عَلَا الشَّيْبُ رَأْسُهُ فَلَمَّا عَلَا قَالَ لِلْبَاطِلِ ابْعِدْ
وَطَيْبِي نَفْسِي أَنْتِي لَمْ أَقُلْ لَهُ كَذَبْتَ وَلَمْ أَبْجَلْ بِمَا مَلَكَتْ يَدِي

Dureyd son of es-Şimmek.

I warned them, both 'Ârid and the men who went 'Ârid's way
—the stock of Benu-s-Saudâ : yea, all are my witnesses.

I said to them : 'Think—even now two thousand are on your
track,

all laden with spear and sword, their captains in Persian mail.'

But when they would hearken not, I followed their road, though I
knew well they were fools, and that I walked not in Wisdom's
way :

For am I not but one of Ghaziyyeh ? and if they err,

I err with my house ; and if Ghaziyyeh go right, so I.

5 I read them my rede one day beneath where the sandhills fail :
the morrow at noon they saw my counsel as I had seen.

A shout rose, and voices cried—'The horsemen have slain a
knight !'

I said—'Is it 'Abdallâh, the man who ye say is slain ?'

I sprang to his side : the spears had riddled his body through,
as weaver on outstretched web plies deftly the sharp-toothed
comb.

I stood as a camel stands with fear in her heart, and seeks
the stuffed skin with eager mouth, and thinks—is her youngling
slain ?

I plied spear above him till the riders had left their prey,
and over myself black blood flowed forth in a dusky tide.

10 I fought as a man who gives his life for his brother's life,
who knows that his time is short, that Death's doom above
him hangs.

But know ye, if 'Abdallâh be gone, and his place a void,
no weakling unsure of hand, and no holder-back was he !

Alert, keen, his loins well girt, his leg to the middle bare,
unblemished and clean of limb, a climber to all things high :

No wailer before ill luck : one mindful in all he did
to think how his work to-day would live in to-morrow's tale :

Content to bear hunger's pain though meat lay beneath his hand :
 to labour in ragged shirt that those whom he served might rest.
 15 If Dearth laid her hand on him, and Famine devoured his store,
 gave but the gladlier what little to him they spared.
 He dealt as a youth with Youth, until, when his head grew hoar
 and age gathered o'er his brow, to Lightness he said—Begone !
 Yea, somewhat it soothes my soul that never I said to him
 'Thou liest,' nor grudged him aught of mine that he sought of
 me.

Ham. pp. 377—80.

NOTES.

Metre *Tarīl*, as in No. II : a short syllable occurs in the third place of the second foot of the hemistich three times in this poem, *viz.*, in vv 1,*a*, 3,*b*, and 12,*a*, which is exceptionally frequent.

The author, Dureyd son of eṣ-Ṣimneh son of el-Ḥārith son of Bekr son of 'Alqameh son of Judā'ah son of Ghaziyyeh son of Jusham son of Mo'āwiyeh son of Bekr son of Hawāzin, was a man of great note in the days of Moḥammed's boyhood and youth. His father eṣ-Ṣimneh had led the Benū Jusham in the War of the Fijār on the day of en-Nakbleh, where the future prophet, then aged 14, was present (A. D. 585). Eṣ-Ṣimneh (whose real name was Mo'āwiyeh, *eṣ-Ṣimneh* being a title meaning "the Serpent") had, according to the Aghānī, five sons by his wife Reyḥāneh daughter of Ma'di-kerib, a woman of el-Yemen : their names were Dureyd, 'Abd Yaghūth, Qeys, Khālid, and 'Abdallah, all warriors of prowess and renown. The stock of Hawāzin had their abode in the mountains and plains to the East of Mekkeh, and were divided into numerous branches, of which the Benū Thaqīf of Tā'if, a strong town no great distance from Mekkeh, the Benū Suleym, the Benū Jusham, the Benū Sa'd ibn Bekr (among whom the Prophet was fostered), the Benū Naṣr ibn Mo'āwiyeh and the Benū Hilāl were the chief. These were engaged in frequent contests among themselves, but, at the time when the event to which the poem relates occurred, were all united against the great stock of Ghatafān, who dwelt to the north of them ('Abs, Duḃyān, 'Abdallāh, Ashja'). It were too long to tell here all that is recorded of Dureyd : his encounter with Rabī'ah son of Mukeddem, of the Benū Firās, on the Day of el-Akḥram (one of the noblest stories of the Ignorance), his wooing of the poetess el-Khansā, or his heroic death at the Battle of Honeyn (A. H. 8.—A. D. 630). His fame as a poet rests chiefly on his affection for his brother 'Abdallāh, in his grief for whose death he composed much verse which has survived, and is conspicuously excellent among the poetry of that day.

In or about the year 610 A. D., a company of the Benû Jusham and the Benû Naṣr ibn Mo'āwiyeh, both of Hawāzin, commanded by 'Abdallāh, the youngest brother of Dureyd, led a foray against Ghatafān, and carried off a great number of camels. They were returning ~~from~~ this expedition with their booty, and had reached the border of the ~~territory~~ of Hawāzin, at a place called *Mun'araj el-Liwā* ("the place where the sandhills curve round," see v. 5 of the poem), when 'Abdallāh proposed that they should halt and divide the spoil. Dureyd, who was with them, dissuaded him, pointing out that they were not yet safe from pursuit. But 'Abdallāh persisted, and swore that he would not leave the spot, till he had taken his fourth part of the captures, and feasted his companions on a *naḡ'ah*—a camel slain by the leader of an expedition from his share of the spoil and divided among his fellows. Next day, while they were preparing the feast, a cloud of dust was seen. A sentinel posted on the sandhills cried—"I see horsemen coming clad in yellow." "They are of Ashja'," said 'Abdallāh, "I care not for them." "I see others," said the sentinel, "who have the points of their lances set between the ears of their horses." "These are of Fezārah," said Dureyd. "And there come also others who gallop along, trailing their lances on the ground." "These are of 'Abs, and Death comes with them!" said the elder brother.

Hardly had 'Abdallāh's men time to mount, when the foe were upon them. 'Abdallāh fell at the very beginning of the fight, slain by a man of the house of Qārib, of 'Abs. Dureyd, fighting to the last over the prostrate body of his brother, fell grievously wounded, and his companions fled, leaving the camels, which the men of Ghatafān recovered. When the fight was over, two men of 'Abs, Zahdam and his brother Qeys, collectively known as *ez-Zahdamāni*, "the two Zahdams," with a rider of Fezārah named Kardam, passed by Dureyd, who was lying among the dead. Dureyd, who was still conscious, heard the elder Zahdam say to Kardam—"Methinks Dureyd is not yet dead: I seemed to see his eyelid move. Get thee down, and finish him." "Nay, he is dead," said Kardam. "Get thee down, I tell thee, and see if he yet breathes." Kardam dismounted and went up to Dureyd: he found him still breathing; but, yielding to compassion, he returned and said: "He is dead, quite dead." Notwithstanding this assurance, Zahdam, before departing, pierced with his lance the body of Dureyd. By a singular chance, this new wound, by opening a passage to a quantity of blood which had gathered within from an inward hurt, and so freeing the lungs, was the means of saving Dureyd's life. When at nightfall the enemy returned home, he dragged himself towards the lands of his tribe, and met a wandering band of men of Hawāzin, who received him and tended him until his wounds were healed.

Some time after, several men of 'Abs and Fezârah, on their way to Mekkeh during the month of pilgrimage, passed by the country where Dureyd dwelt. Although it was the time when war was forbidden, they did not feel wholly secure, and had hidden their faces in their *lithâms*, the black kerchiefs with which the Bedawis cover their heads, leaving only their eyes visible. Dureyd perceived them, and went forth to meet them—"What men are ye?" he asked. "Is it I of whom thou askest?" answered one of the travellers. Dureyd recognized the voice of Kardam;—"Ah," he cried, "there is no need to ask further: thou and these who follow thee have nothing to fear from me." Then he embraced him, and gave him a horse, a sword, and a lance, and said, "Take this as a requital of the kindness which thou shewedst to me on the day of el-Liwâ."*

v. 1. 'Ârid is said by et-Tebrizî to be another name of 'Abdallâh, who was likewise called Khâlid (but according to the Aghânî, Khâlid was a fourth brother of Dureyd's). The Benu-s-Saudâ were the family of Dureyd and 'Abdallâh, whose mother Reyhâneh was very dark, being of el-Yemen, where African blood was largely mingled with Arab: *es-Saudâ* means "the black woman."

v. 2. "Laden," *mudajjaj*: from *dajja*, "he walked slowly, as one carrying a heavy load." The word therefore means "fully armed."

The most esteemed coats of mail were brought from Persia, and in that country from Soghiana (*es Sughd*); see *Hamâseh*, p. 349:—

*Qurûmun tesâmâ min Nizârin, 'aleyhimî
muđâ'fatun min nesji Dû'ûda wa-s-Sughdî.*

"Warriors who trace their lineage from Nizâr, and on them
double coats of mail of the weaving of David and from es-Sughd."

(David is said by Arab tradition, embodied in the Qurân, Sûrah xxi, 80, to have been taught by God the art of weaving mail.) The best swords came from India (*hindî, muhenned*) and el-Yemen (imported thither by sea from the former country); and the best spears were made at el-Khatt in el-Bahrân, from bamboos also brought from India.

vv. 4 and 5 are given in inverse order in et-Tebrizî's text: that in which I have placed them is clearly the right one.

Ghaziyyeh, as will be seen from the genealogy of Dureyd given above, was the name of the family in Jusham to which he and his brethren belonged.

* This history is taken almost word for word from Causin de Perceval, *Essai*, ii, pp. 551-554, who again in like manner follows Fresnel, *Jour. Asiat* Février 1838, who translates from the Aghânî. It would be difficult to better the work of two such accomplished hands. For the original, see *Agh.* ix, 3-4.

v. 7. "The weaver's comb:" *eş-şaydāşî*, plural of *şîşiyeh*, which is the comb used by the weaver to push up the threads of the woof into the web, so as to make the fabric close.

v. 8. "A camel," *ḍāt-el-bawwi*: the *baww* is the stuffed skin of a young camel (or with a cow, a calf,) cast before a she-camel who has her young one in order to induce a flow of milk.

v. 12. "Alert, keen, his loins well girt"—all one attempt to render *kemîsh-el-'izâr*. *Kemîsh* means properly light, quick, active, and is joined to *'izâr* (the trailing waistcloth with which an Arab girt himself, loose and flowing in peace, tightly wound and raised in war or serious business) by a contracted construction of which examples are frequent. "His leg to the middle bare," as would naturally be the result of girding up the *'izâr*. "A climber to all things high:" *ṭallâ'u 'anjudî*, a proverbial phrase for a man who seeks fame and glory. This verse is found with another reading later on in the *Ḥamāseh* (p. 765):—

Qaşîru-l-'izâri, khârijun nişfu sâqihi,
şabûrun 'ala-l-'azzâi, ṭallâ'u 'anjudî

i. e.,

"with his *izâr* girt up short, his leg bare up to the middle,
patient in face of hardship, a climber to all things high."

v. 17. This most touching line has been appropriated by another poet, a contemporary of, but considerably younger than, Dureyd, Şakhr son of 'Amr, of the Benû Suleym, brother of the poetess el-Khausâ whom Dureyd wooed. In a lament over his brother Mo'âwiyeḥ, given in the *Ḥamāseh*, p. 439, he says—

Waṭayyaba nefsî 'annanî lam 'aql lahu
keḍebta, walam 'abkhal 'aleyhi bimâliyâ.

VI.

قال دريد بن الصمة

مَكَانَ الْبُكَاءِ لَكِنْ بُذِيتُ عَلَى الصَّبْرِ	تَقُولُ أَلَا تَبْكِي أَخَاكَ وَقَدْ أَرَى
لَهُ الْجِدْتُ أَلَا عَلَى قَتِيلِ أَبِي بَكْرٍ	فَقُلْتُ أَعْبَدَ اللَّهُ أَبْنِي أُمَِّ الدِّي
وَعَزَّ الْمَصَابِ حَتَّى قُبِرَ عَلَى قَبْرِ	وَعَبْدٌ يَغُوثَ تَحْجِلُ الطَّيْرَ حَوْلَهُ

أَبَى الْقَتْلُ إِلَّا آلَ صِمَّةَ إِنَّهُمْ أَبُو غَيْرُهُ وَالْقَدْرُ يَجْرِي إِلَى الْقَدْرِ
فَمَا تَرَيْنَا لَا تَزَالُ دِمَاؤُنَا لَدَى وَاتْرِ يَسْعَى بِهَا آخِرُ الدَّهْرِ
فَإِنَّا لِلْحِمِّ السَّيْفِ غَيْرَ نَكِيرَةٍ وَلُحْمِهِ حِينًا وَلَيْسَ بِنَدَى نَكْرِ
يَغَارُ عَلَيْنَا وَاتْرِينِ فَيُشْتَفَى بِنَا إِنْ أَصَبْنَا أَوْ نُغِيرُ عَلَى وَتْرِ
قَسَمْنَا بِذَلِكَ الدَّهْرِ شَطْرَيْنِ بَيْنَنَا فَمَا يَنْقُضِي إِلَّا وَتَحْنُ عَلَى شَطْرِ

Dureyd son of es-Simmeh.

‘Weepest thou not,’ said she, ‘for thy brother?’ Ay, and sooth enough

cause there is for tears, but that my frame was builded to endure.

‘Whom wouldst thou that I should weep for,’ said I,—‘Abdallâh the dear,

or the slain of Abû Beker, he whose grave is on the height,

‘Or that other, ‘Abd-Yaghlûth, round whom the ravens croak and hop?

Sore bereavement, load of sorrow—one grave filled, another dug!’

Slaughter chose from all men born the race of Simmeh for her own : they chose her, and would none other : so fate goes to fated end.

5 Yea, and if our blood be ever end and aim of vengeful hands,

striving day by day to spill it till the days shall be no more,

Flesh to feed the Sword are we, and unrepining meet our doom :

well we feed him, slain or slaying, joyfully he takes our food !

Hearts are cured of rancour-sickness, whether men against us war,

or we carry death among them : dying, slaying, healing comes.

So we halve our days between us, we and all men else our foes :

no day passes but it sees us busy with this deed or that.

Ham. pp. 380-2.

NOTES.

The metre is *tawîl* of the first form, which only differs from that of Nos. II, IV, and V by having, in the last foot of the second hemistich of each verse, a long syllable instead of a short one in the third place, thus :

— — — — — | — — — — — || — — — — — | — — — — — | — — — — —

The translation is in the ordinary long English trochaic measure.

The poet represents himself as addressed by a woman, who blames him for not shewing sorrow for the death of his brethren. This "blaming woman," *'ādīleh*, is a stock figure in old Arab poetry, whether her office be to reprove a man for his extravagance and excess in wine, to cast doubt on his courage, to question the nobility of his race, or any other of the *ṣaṭṭ*. Instances will be found on almost every page of the *Hamāseh*. In later poetry this usage disappears, the seclusion of women under el-Islām having made it inconsistent with the manners of the time.

Dureyd, as stated in the notes to No. V, had four brothers, all of whom fell in fight, as he did himself. The three here mentioned are 'Abdallāh, the circumstances of whose death have just been told, Qeys, who was slain in a combat with the men of Abû Bekr ibn Kilāb, a branch of the Benû 'Âmir, and 'Abd-Yaghûth, who died in battle with the Benû Murrah of Ghatafân.

v. 2. The licence by which, for the sake of the metre, *Beker* is written for *Bekr* is one admissible and frequently used in the original Arabic.

v. 3. 'Abd-Yaghûth : *Yaghûth*, "The Helper," was the name of an idol worshipped by the Yemenite tribes of Moṣḥij, who bordered Hawāzin on the south. Most probably the real name of the other brother, called in the text 'Abdallāh, was *'Abd-el-Lât*, "Servant of el-Lât." That many such pagan names mentioned in the old poems were changed when el-Islām became prevalent is certain.

v. 4. Et-Tebrizî states that not only Dureyd's father, Mo'âwiyeh son of el-Hârith, was called *eş-Şimneh*, "The Serpent," but also his uncle Mâlik : the latter was known as "*eş-Şimneh* the greater," and Dureyd's father as "*eş-Şimneh* the less."

v. 7. "Hearts are cured of rancour-sickness": *yushtafâ bind*. The desire for vengeance is represented in old Arab verse as a burning fever, and the satiating of it as recovery from a disease. So one says *ishtefeytu bihi*—"I was cured by means of him," meaning "I wreaked my vengeance on him and assuaged my desire thereof." The idiom is of constant occurrence.

The whole poem is considered by the old critics (Aghânî, ix. 3) a splendid example of what the Arabs call *ṣabr*, endurance, hardihood, heroic temper; and Dureyd's life was not unworthy of it. For his death, see the account of the Battle of Honeyn in Caussin de Perceval, *Essai*, iii, pp. 245—253, which in this incident follows the Aghânî, ix, 14-16.

VII.

قال عبدة بن الطبيب العبشمي

عَلَيْكَ سَلَامُ اللَّهِ قَيْسَ بْنَ عَاصِمٍ وَرَحْمَتُهُ مَا شَاءَ أَنْ يَرْحَمَكَ
نَكِيَّةً مَنْ غَادَرَتْهُ غَرْضُ الرَّدَى إِذَا زَارَ عَنْ شَحْطِ بِلَادِكَ سَلَامًا
فَمَا كَانَ قَيْسٌ هَلَكُهُ هَلَكَ وَاحِدٍ وَلَا كَدُهُ بَنِيَانُ قَوْمٍ تَهْدَمَا

‘Abdeh son of et-Tabīb.

On thee be the peace of God, O Qeys son of ‘Āṣim, and

His mercy, the manifold, so long as He will it shew !

—The greeting of one whom thou hast left here the mark of Death,
who went far away, and comes to greet thee though in thy grave.

When Qeys died, it was not one who went down the way of Death :
a People it was whose house with his death in ruin fell.

Ham. pp. 367-8.

NOTES.

Metre *Tawīl*, second form (as in Nos. II, IV, and V).

‘Abdeh son of et-Tabīb was a *Mukhadrim*, or a poet who lived both before and after the promulgation of el-Islām. He belonged to the family of ‘Abbusheins son of Sa’d son of Zeyd-Menāh son of Temīm, and was an object of the bounty of Qeys son of ‘Āṣim, the great chief of Temīm in the days of the Prophet, whose death he here laments. The third verse is often quoted as the perfection of posthumous praise (Aghânî, xviii. 163).

Qeys belonged to that division of the sub-tribe of Temīm, Sa’d son of Zeyd-Menāh, called the Benū Muqâis. He is first heard of on the Day of Sitâr (about 606 A. D.), when he defeated Ḥanīfeh and slew Qatādeh son of Meslemeh their chief. His wife, Menfûseh, bore him many children, and he is said to have been the means of reviving in those days the evil custom of female infanticide, which had almost died out among the Arabs, by putting to death all his daughters. He fought against Meḏhij at el-Kulâb (612 A. D.), when ‘Abd-Yaghûth chief of the Bel-Ḥârith was slain. In A. H. 9 (A. D. 630) he appeared at el-Medīneh at the head of a great deputation from the whole tribe of Temīm, when a famous contest in verse took place before Moḥammed between Zibriqân son of Bedr, the poet of Temīm, and Ḥassân son of Thâbit, the poet of the Anṣâr. This ended in Temīm accepting el-Islām in a body, when Qeys was made receiver of the

poor-rate (*zekât* or *ṣadaqât*) for his tribe, the Benû Sa'd. After the death of the Prophet (A. D. 632), he was one of those who revolted, with many others of Temîm, against Abû Bekr, but shortly afterwards submitted himself and joined in the expedition led by el-'Alâ el-Hâdramî against el-Lahṣân, which crushed opposition in that quarter. I have not been able to ascertain when he died.

VIII.

قال مالك بن الربيع

تَدَكَّرْتُ مَنْ يَبْكِي عَلَيَّ فَلَمْ أَجِدْ سِوَى السَّيْفِ وَالرَّمْحِ الرَّدَيْنِيِّ بَاكِياً
وَأَشْقَرَ خُنْدِيدٍ يَجُرُّ عِثَانَهُ إِلَى الْمَاءِ لَمْ يَدْرِكْ لَهُ الْمَوْتَ سَاقِياً

Mâlik son of er-Reyb.

I thought who would weep for me, and none did I find to mourn
but only my sword, my spear, the best of Rudeyneh's store,
And one Friend, a sorrel steed, who goes forth with trailing rein
to drink at the pool, since Death has left none to draw for him.
Ham. p. 247, quoted in Commentary.

NOTES.

Metre *Tawîl*, as in No. II.

These lines are quoted in el-Tebrizî's commentary on p. 247 of Freytag's edition of the *Hamâseh*, in illustration of the word *khindîd*, a stallion. The poem from which they are taken is a lament (*marthiyeh*) by Mâlik son of er-Reyb over his own death, a portion of which is quoted in the *Kitâb-el-Aghânî* (xix, 162), and the whole of which is to be found in the 'Iqd-el-Ferîd of Ibn 'Abd Rabbihî (ii, 10-11). The author was a brigand of the tribe of Mâzin who roamed over the country of Temîm in the neighbourhood of el-Baṣrah during the early years of the Umawî dynasty. When Mo'âwiyeh sent Sa'id son of 'Othmân son of 'Affân as his viceroy to Khurâsân, the latter on his way to Persia met Mâlik, and, struck by his noble mien and gallant bearing, invited him to accompany him. Mâlik, however, fell sick (some say, was stung by a serpent), and died on the way to Khurâsân. He is best known for the grand poem of which these verses form a part, and for his love for his daughter, shewn in a touching piece of verse quoted in the *Aghânî* (xix, 167).

v. 1. "Made by Rudeyneh," *Rudeynī*, is a stock epithet of spears; Rudeyneh, tradition says, was a woman of el-Khatt in el-Bahrān, who was most expert at straightening spears: whence every good spear is called by her name.

IX.

قال مريبك المزموم يرثى امراته ام العلاء

أُمُّ الْعَلَاءِ فَنَادَهَا لَوْ تَسْمَعُ	أَمْرٌ عَلَى الْجَدَّتِ الَّذِي حَلَّتْ بِهِ
بَدَأَ يَمُرُّ بِهِ الشُّجَاعُ فَيَقْزَعُ	أَنِّي حَلَلْتُ وَكُنْتُ جَدَّ فَرْقَةٍ
إِنْ لَا يُلَاقِيكَ الْمَكَانُ الْبَلَقُ	صَلَّى عَلَيْكَ اللَّهُ مِنْ مَفْقُودَةٍ
لَمْ تَدْرِ مَا جَزَعُ عَلَيْكَ فَتَجْزَعُ	فَلَقَدْ تَرَكْتُ صَغِيرَةً مَرْحُومَةً
فَتَبَيْتَ تُسَهِّرُ أَهْلَهَا وَتُفْجِعُ	هَ فَفَقَدْتُ شَمَائِلَ مِنْ لِزَامِكِ حُلُومَةٍ
طَفَفَتْ عَلَيْكَ شُرُونُ عَيْنِي تَدْمَعُ	وَإِذَا سَمِعْتُ أَبْنَيْهَا فِي لَيْلِهَا

Mureylik el-Mezmūm.

Take thou thy way by the grave wherein thy dear one lies
 —Umm-el-'Alâ—, and lift up thy voice: ah if she could hear!
 How art thou come—for very fearful wast thou—to dwell
 in a land where not the most valiant goes but with quaking
 heart?

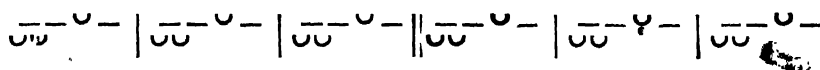
God's love be thine and His mercy, O thou dear lost one!
 not meet for thee is the place of shadow and loneliness.
 And a little one hast thou left behind—God's ruth on her!
 she knows not what to bewail thee means, yet weeps for thee.

5 For she misses those sweet ways of thine that thou hadst with her,
 and the long night wails, and we strive to hush her to sleep
 in vain.

When her crying smites in the night upon my sleepless ears,
 straightway mine eyes brim-full are filled from the well of tears.

NOTES.

The metre is the *Kâmil*, scanned thus :



The English imitates the Arabian measure.

I have ascertained nothing of the author of these lines. *Muweylik* is the diminutive of *Mâlik*, and *el-Mezmûm* means "bridled,"—probably a nickname given for some peculiarity of feature. The verses were evidently composed after el-Islâm. Umm-el-'Alâ was the poet's wife, whose loss he mourns.

v. 4. I have taken *merhûmeh* in the sense in which it is used when one dead is spoken of—as a prayer that God's mercy may light on him or her.

v. 7. "The well of tears," *shu'ûnu 'eynî : shu'ûn*, plural of *sha'n*, are the tear-ducts of the eye.

X.

قال خلف بن خليفة

أَعَاتِبُ نَفْسِي أَنْ تَبَسَّمْتُ خَالِيًا وَقَدْ يَضْحَكُ الْمَوْتُورُ وَهُوَ حَزِينُ
وَبِالْدَّيْرِ أَشْجَانِي وَكَمْ مِنْ شَيْءٍ لَهُ دُونِ الْمَصَلَى بِالْبَقِيعِ شُجُونُ
رَبِّي حَوْلَهَا أَمْدَالُهَا إِنْ أَتَيْتَهَا قَرَيْتَكَ أَشْجَانًا وَهَنْ سُكُونُ
كَفَى الْهَجْرَ أَنَا لَمْ يَضَحْ لَكَ أَمْرُنَا وَلَمْ يَأْنَسَا عَمَّا لَدَيْكَ يَقِينُ

Khalaf son of Khalîfseh.

I reprove my soul when no man is by for every smile :

yea, a man may laugh, and be sick at heart with a sorrow sore.

In ed-Deyr they lie, my lost ones : many another too

knows well the pain el-Muşallâ hides in its slope of graves !

Hillocks, around them a many like : and if thou go there,

they will feed thee full of the bread of woe though they stir no whit.

Far away enough are we from thee, since it recks thee naught

how days fly here, nor we know aught sure how they go with thee !

Ham. p. 404.

NOTES.

The Arabic is in the *Tawil* of the third form ; the second hemistich is scanned thus :

٠ — ٠ | ٠ — — — | ٠ — ٠ | ٠ — —

The English adopts the form of the *Kamil*, as in No. IX.

The author, Kbalaf son of Khalifeh, was an inhabitant of el-Medîneh, and is mentioned as an authority on the traditions respecting the Prophet.

v. 1. I have, following the commentary, joined *khâliyan* with *o'âlîbu*, in the sense of *alone* : but it might easily be taken with *tebessemtu*, in the sense of "light-hearted, as if free from care."

v. 2. Ed-Deyr is the name, apparently, of the spot where his dear ones were buried. It is the usual word for a Christian monastery. *EL-Muṣallâ*, "the place of prayer", was the name of a small mosque which stood at the top of a slope called *baqî-el-Gharqad*, used as the cemetery of el-Medîneh.

XI.

قال عبد الله بن ثعلبة الحنفى

لِكُلِّ أَنْاسٍ مَقْبَرٌ بِفَنَائِهِمْ فَمَنْ يَنْقُصُونَ وَالْقُبُورُ تَزِيدُ
وَمَا إِنْ يَزَالُ رَسْمُ دَارٍ قَدْ اخْلَقَتْ وَبَيْتٌ لَمِيتٌ بِالْفَنَاءِ جَدِيدُ
هُمْ جِبْرَةُ الْأَحْيَاءِ أَمَّا جَوَارِهِمْ فَدَانٍ وَأَمَّا الْمُلْتَقَى فَبَعِيدُ

'*Abdullâh son of Tha'lebeh el-Hanafî.*

Before the door of each and all a slumber-place is ready set :

men wane and dwindle, and the graves in number grow from day to day ;

And ever more and more outworn the traces fade of hearth and home,
and ever yonder for some dead is newly built a house of clay.

Yea, neighbours are they of the living : near and close their fellowship ;

but if thy soul would win their converse, thou must seek it far
away.

Ham. p. 405.

NOTES.

The metre is the third form of the *Tawil*, as in No. X.

Of the author I know nothing. He was a member of the tribe of Hanifeh, an important division of Bekr who dwelt in el-Yemâneh in the southern part of the central mountain country of Nejd. These verses are frequently quoted (*e. g.*, 'Iqd, ii, 6), but their exact date I have not been able to ascertain: Ibn-Khallikân says that they were repeated by Ya'qûb son of Dâ'ûd, once the Wezîr of el-Mahdî, when on his release from prison in A. H. 175 he heard of the death of his brothers.

v. 1. The word *finâ* ("before the door") means the space in front of the tent. The same word is rendered "yonder" in v. 2.

XII.

قال عمرو بن قمية

يَا لَهْفَ نَفْسِي عَلَى الشَّبَابِ وَلَمْ
أَفْقِدْ بِهِ إِذْ فَقَدْتُهُ أَمَمًا
إِذْ أَسْحَبُ الرِّبْطَ وَالْمَرْوَةَ إِلَى
أَدْنَى نِجَارِي وَأَنْفَضُ اللَّمَمَا
لَا تَغْبِطُ الْمَرْءَ أَنْ يُقَالَ لَهُ
أَمْسَى فُلَانٌ لَسِنَّهُ حَكَمًا
إِنْ سَرَّهُ طَوْلُ عُمُرِهِ فَلَقَدْ
أَفْضَحَى عَلَى الْوَجْهِ طَوْلَ مَا سَلَمًا

'Amr son of Qamī'ah.

Alas my soul for Youth that's gone—
no light thing lost I when he fled !
What time I trailed my skirts in pride,
and shook my locks at the tavern's door.
Nay, envy not a man that men
say, 'Age has made him ripe and wise :'
Though thou love life and live long safe,
long living leaves its print on thee.

Ham. p. 504.

NOTES.

The metre of this poem is the somewhat rare one called *Munsariḥ*, which the old prosodists divide thus :—

— — ◡ — | — — — ◡ | — — ◡ — || — — ◡ — | — — — ◡ | — ◡ ◡ —

The existence of a metrical foot *maf'ûlâtū* is however very questionable. The poem itself exhibits the following scansion:—

◡ — ◡ — ◡ — ◡ — ◡ ◡ — || — — ◡ — — ◡ — ◡ — ◡ ◡ —

Now, if we compare this with the *Besîf*:—

◡ ◡ ◡ — | ◡ ◡ — | — ◡ — | ◡ ◡ — || ◡ ◡ ◡ — | ◡ ◡ — | — — ◡ — | ◡ ◡ —

we find that the two coincide, except in the third foot of the *Besîf*, which in our poem appears as ◡ — instead of — — ◡ —. I am therefore inclined to regard this metre as a shortened form of the *Besîf*, and to divide it thus:—

— — ◡ — | — ◡ — | ◡ — | ◡ ◡ — || — — ◡ — | — ◡ — | ◡ — | ◡ ◡ —

Although the first syllable of the last foot of each hemistich is short, it is considered by Arabian metrists to represent an original long syllable: that is, the foot *fâ'ilun* is shortened to *fa'ilun*. It therefore receives a stress in utterance which makes the foot something more than a mere anapaest. The first foot may show the varieties ◡ — ◡ — and — ◡ ◡ —, but these are not found in this poem.

The piece is interesting as one of the oldest specimens of Arabic poetry that have come down to us. 'Amr son of Qamî'ah, its author, was grandson of Sa'd son of Mâlik son of Dubey'ah son of Qeys son of Tha'lebeh, of the tribe of Bekr, who was a leader in the war of Basûs, and an ancestor of the poet Tarafeh. He is claimed as the first of Nizâr (that is, of the Ma'addic Arabs as opposed to those of el-Yemen) who made regular *qaṣîdehs*, and as the master in this art of Imra'-el-Qeys. He reached a great age, and was the companion of Imra'-el-Qeys in his journey to the Court of the Greek Emperor, which C. de Perceval fixes in 535 A. D.: he died, however, on the way in Asia Minor, and was called by the Arabs '*Amr ed-dâ'i*', that is, "Amr the lost." Two verses of his are quoted by et-Tebrîzî on p. 131 of the *Ḥamâseh*, which are in a form of the *Besîf* closely allied to the *Munsarih*, and quite in the vein of those given above:—

El-ka'su mulkun liman 'a'malahâ
wa-l-mulku minhu ṣayhîrun wa-kebîr:
minha-s-ṣabûhu-l-latî tetrikunî
leytha 'ifirrîna wa-l-mâlu kellîr.

"The cup is a kingdom to him who plies it,
 and his kingdom, though little, how vast it is!
 Thereout I drink in the morning, and am
 a lion of 'Ifirrîn, my wealth overflowing."

i. e., the morning draught gives me both valour and generosity, so that in giving I am as a king.

v. 1. "Light thing," 'amaman: that is, something near at hand, easily to be grasped and recovered.

v. 2. The translation fails to give the full force of the original here, which may thus be rendered:—"What time I trailed my robes of silk and wool to the nearest of my wine-sellers, and shook loose my locks." The difference between *reyṭ* (plural of *reyṭah*) and *murūt* (plural of *mirt*) is not certain: both were sumptuous garments, worn over the under-clothing, and long in the skirt. "The nearest of my wine-sellers" shews that he was a wealthy man, and had many to supply him with wine. The use of *tijār* (plural of *tājir*), which properly means traders in general, in the exclusive sense of wine-sellers, is worthy of notice, though frequent in the poetry of the pagan time.

v. 3. "Ripe and wise": so I render *hakam*, which properly means one who on account of his years and his wisdom is chosen as a judge or arbiter in disputes between tribe and tribe, or man and man. Such a *hakam* was the ancient 'Āmir son of cō-Ḍarib, ancestor on the mother's side of the tribes of Ṭhaqīf and 'Āmir son of Ṣaṣ'aḥ, who on account of the drowsiness caused by great age required to be roused to attention by a thrust from a stick (or, as some say, by one of his sons knocking one stick against another to awake him). See Ḥam., p. 98, and el-Meydānī, at the proverb *inna-l-'aṣū qurī'at liḍi-l-ḥilmi* (i, 32, Būlāq edn.).

v. 4. Here also I have diverged from the phrase, but not the senso, of the original, which, literally rendered, is—"If the length of his long life has delighted him, yet there has become apparent in his face the long time that he has been saved (from death)." In changing the third to the second person, I have merely put the general result intended in another way exactly equivalent.

XIII.

قال سلمى بن ربيعة

لَمَّا شَوَّاءُ وَنَشْوَةٌ	وَحَبَبَ الْبَارِلِ الْأَمُونِ
يَجْشِمُهَا الْمَرْءُ فِي الْهَوَى	مَسَافَةً الْغَائِطِ الْبَطِينِ
وَالْبَيْضُ يَرْفُلُنْ كَالدَّمَى	فِي الرِّبِطِ وَالْمَدْعَبِ الْمَصُونِ
وَالْكَذْرُ وَالْخَفْضُ آمِنًا	وَشَرَعَ الْمِزْهَرِ الْخُنُونِ

٥ مِنْ لَذَّةِ الْعَيْشِ وَالْفَتَى لِلدَّهْرِ وَالْدَّهْرُ ذُو فُذُونِ
 وَالْعُسْرُ كَالْيُسْرِ وَالْغِنَى كَالْعُدْمِ وَالْحَيُّ لِلْمُذُونِ
 أَهْلَكَنَ طُصْمًا وَبَعْدَهُ غَدَى بِهَمٍّ وَذَا جُذُونِ
 وَأَهْلَ جَاشٍ وَمَأْرِبٍ وَحَى لُقْمَانَ وَالتَّقُونِ

Sulmî son of Rabî'ah.

Roast flesh, the glow of fiery wine,
 to speed on camel fleet and sure
 As thy soul lists to urge her on
 through all the hollow's breadth and length ;
 White women statue-like that trail
 rich robes of price with golden hem,
 Wealth, easy lot, no dread of ill,
 to hear the lyre's complaining string—
 5 These are Life's joys. For man is set
 the prey of Time, and Time is change.
 Life strait or large, great store or naught,
 all's one to Time, all men to Death.
 Death brought to naught Tasm long ago,
 Ghaḍî of Bahm, and Ḍû Judûn,
 The race of Jâsh and Mârib, and
 the House of Luqmân and et-Tuqûn.

Ham. pp. 506-7.

NOTES.

The metre of this poem is unique, and does not occur among the forms settled either by el-Khalil son of Aḥmed, the founder of Arabic prosody, or by Sa'îd son of Mas'adeh el-Akhfash. Et-Tebrizî considers it a species of *Besîf*. The following is its scheme :—

— — — — — | — — — — — | — — — — — || — — — — — | — — — — — | — — — — —

The author, Sulmî son of Rabî'ah, belonged to the family of the Benu-s-Sid ("Sons of the Wolf") of Ḍabbeh, a tribe descended from Muḍar by Ṭābikhah son of Ilyās. The men of Ḍabbeh were one of the *Ribāb*, or five confederate tribes all descended from Ṭābikhah, and closely

allied with Temīm, among whom they dwelt. There is another longer poem by the same author, quite in the spirit of this, at pp. 274-6 of the Ḥamāseh. I have not been able to ascertain when he lived, but it must have been in the days of the Ignorance.

v. 1. "Camel," *bāzil*, properly a she-camel nine years old, when ~~she~~ is strongest and fittest to bear fatigue. *Khabab* means a quick trot.

v. 3. "Statue-like," *ka-d-dumā*: this comparison is found more than once in the poems of Imra'-el-Qeys. There is a strangeness about it in the mouth of a Desert Arab. Imra'-el-Qeys was a prince who had travelled and seen strange lands, and among them probably the sculptures of the Greeks. The Dabbī, who had a taste for the pleasures of the town, may also have seen Greek statues in Syria, though his poem at pp. 274-6 shews him as a genuine Bedawī.

v. 7. Ṭasm was one of the old lost races of Arabia, who dwelt, with a sister tribe named Jedīs, in a valley called el-Jaww in el-Yemāneh, in southern Nejd. A quarrel broke out between Ṭasm and Jedīs, in which the latter tribe massacred the whole of the former, except one man named Riyāh, who escaped and invoked the aid of Ḥassān son of As'ad, the Tubba' of el-Yemen. This king led an army against Jedīs, and exterminated the whole race (see the Ḥimyerite Qasīdeh, vv. 79-80). Nothing certain is known of the date of this event, and Ṭasm to an Arab was but the name of a people that perished long ago. Of Ghaḍī of Bahm also nothing is known but his name: he seems to have been a prince of Irem, of the race of 'Ād, another lost people, and is mentioned together with Luqūnān and Ḍū Jeden in a verse cited by el-Jauharī:

Lau 'amantī kuntu min 'Ādin wamin 'Iremīn

Ghaḍiyya Buḥmin wa-Luqūnān wa-Ḍū Jedeni.

"If I had been a man of the race of 'Ād and of Irem,

Ghaḍī of Bahm or Luqūnān or Ḍū Jeden."

Ḍū Judūn probably stands for Ḍū Jeden, the surname of a king of Ḥimyer whose name was 'Alas son of el-Ḥārith. The Arabs say that Ḍū Jeden was so named from his beautiful voice, and that he was expert in song. The name is however, like all the names of Ḥimyer compounded with *Ḍū*, a local one, Jeden being the city or fortress after which the Prince was called. The name Ḍū Jeden is found in Halévy's Ḥimyerite inscriptions: see Major Prideaux's Edn. of the Ḥimyerite Qasīdeh, p. 58. There was another Ḍū Jeden called el-Akbar, the greater, whose name was 'Alqameh, of much older date, a cousin of Bilqīs the Queen of Sebā, whom Arab legend makes the contemporary of Solomon.

v. 8. Of the race of Jāsh we likewise know nothing, and the commentator does not help us. Freytag suggests that the right reading is Ijāsh, given in the Qāmūs as the name of a place in el-Yemen.

Mârib is the name of the famous dyke in el-Yemen, the bursting of which caused the dispersion northwards of all the tribes who dwelt in its neighbourhood. This dyke was built by Luqmân, king of the second 'Âd (that is, the remnant which remained on the destruction of the first 'Âd with their city Irem of the Pillars), and on it depended for its irrigation a vast tract of country. Its remains are still visible, and have been visited by European travellers (C. de Perceval, *Essai*, i. p. 17). Luqmân and his family, after a rule which the Arabs say lasted a thousand years, was overthrown by Ya'rûb, son of Qahtân, who founded a new empire which afterwards became that of the Himyerite kings. 'Abd-Shems Seba, father of Himyer, made Mârib his capital, and repaired and completed the dyke. The bursting of the dyke is placed by C. de Perceval in 120 A. D., and the dispersion which followed it is proverbial in Arab history. To this event the dynasties of Ghassân and el-Hîreh owed their origin, and by reason of it the north and centre of Arabia became peopled by numerous tribes from el-Yemen, quite distinct from the race of Nizâr or Ma'add.

Luqmân is the king of the second 'Âd just mentioned. Et-Tuqûn is the plural of et-Tiqn, a name borne by two men in old Arab legend, 'Amr son of Tiqn, a famous archer in the days of Luqmân of 'Âd, and Ka'b son of Tiqn, mentioned by el-Meydânî. "A better archer than ibn-Tiqn" is given as an ancient proverb in the collection of the last named author (i. 278).

XIV.

قال مالك بن حريم الهمداني

وَبَدَيْ لَكَ الْيَوْمَ مَا لَسْتَ تَعْلَمُ	أُنْبِيتُ وَالْيَوْمَ ذَاتُ تَجَارِبِ
وَيَتَنَّى عَلَيْهِ الْحَمْدَ وَهُوَ مُدَمِّمٌ	بِأَنَّ نَرَاءَ الْمَالِ يَنْفَعُ رَبَّهُ
يُحْزَنُ كَمَا حَزَّ الْقَطِيعُ الْحَرَمُ	وَأَنَّ قَلِيلَ الْمَالِ لِلْمَرْءِ مُفْسِدٌ
وَيَقْعُدُ وَسَطَ الْقَوْمِ لَا يَنْكَلِمُ	يَرَى دَرَجَاتِ الْمَجْدِ لَا يَسْتَطِيعُهَا

Mâlik son of Harîm el-Hemdânî.

Yea, knowledge I have from Time, the best of all counsellors,
 the passing of days that brings to light wealth of hidden lore :
 I know how the Rich is served by riches, how fair the praise
 they gather with cunning hands, whatso be the blame his due ;

And how lacking wastes and wears a man though his heart be high
 —yea, sharper the sting thereof than falling of untanned scourge!
 He looks on the steps of Fame—the steps he can never tread—
 and sits in the midst of men in silence without a word.

Ham. pp. 520-1.

NOTES.

Metre *Tawil*, as in No. II. I have discovered nothing regarding the author or his date. The tribe of Hemdân, to which he belonged, was a branch of Meðhij, a stock of el-Yemen.

XV.

قال آخر

أَقُولُ لِصَاحِبِي وَالْعَيْسُ تَهْوَى بِنَا بَيْنَ الْمُنِيفَةِ فَالْضَّمَارِ
 تَمْنَعُ مِنْ شَمِيمِ عَرَارٍ نَجْدٍ فَمَا بَعْدَ الْعَشِيَّةِ مِنْ عَرَارِ
 أَلَا يَا حَبْدًا نَفَحَاتُ نَجْدٍ وَرِيًّا رَوْضِهِ بَعْدَ الْقَطَارِ
 وَأَهْلَكَ إِذْ يَحُلُّ الْحَيُّ نَجْدًا وَأَنْتَ عَلَى زَمَانِكَ غَيْرُ زَارِ
 شُهُورٍ يَنْقُضِينَ وَمَا شَعَرْنَا بِأَنْصَافٍ لَهْنٍ وَلَا سِرَارِ

One unnamed.

I said to my fellow while our beasts were speeding
 with us from el-Munîfeh to ed-Dimâr—
 ‘Drink deep the scent of the flowery Upland meadows,
 ‘for after to-night no more shall we see ‘*Ardr.*’
 How sweet the breezes that blow thence to us-ward,
 when all its meads with rain besprinkled are!
 How fair the days when there thy tribesmen halted,
 and naught on thy spirit did that good time jar!
 5 Months waxed and waned, and we in our heart’s gladness
 recked not if full-moon-tide were near or far.

Ham. p. 548.

NOTES.

The metre is *Wāfir*, as in No. III. The English only roughly imitates it, and does not attempt to keep up the equivalence of two short syllables or one long in the third place of each foot: the second hemistich of the English is also catalectic, the Arabic not.

v. 1. "Our beasts," "*el-'is*": '*is*, plural of '*aysā*, means a she-camel almost white in colour, slightly tinged with yellow. This is one of the colours most esteemed in camels among the Arabs.

* El-Munifeh and ed-Ḍimār are evidently stages on the road out of Nejd. The Marāsid gives the former (iii, 167) as the name of a water belonging to Temīm towards Felj, where was fought one of their battles. The Qāmūs says it is a water of Temīm between Nejd and el-Yemāmeh. Ed-Ḍimār in the Marāsid (ii, 185) is likewise given as the name of a place between Nejd and el-Yemāmeh. This locality does not however suit very well here. El-Yemāmeh is as much part of Nejd as any other portion of that region; and a rider going from central to southern Nejd would hardly speak of himself as quitting the upland for the plain. El-Munifeh means merely "the high place," and ed-Ḍimār "the valley that hides, by enclosing him, the traveller therein" (or perhaps a hollow in the sand-sea rather than a valley); and both may be the names of many other places than those specified. I take it that the journey intended was rather towards the north than the south.

v. 2. '*Arār* is the name (in the collective form) of a sweet-smelling yellow flower which in the spring season covers the uplands of Nejd. El-Khalīl says that it is *el-bahāret el-barriyyeh*, *Buphthalmum* or ox-eye. Others say that it is a bush (*Buphthalmum arborescens*), and Ibn-Barri that it is the wild narcissus. The complexion of a woman is compared to the colour of its blossoms by el-'A'shā in the line

*beydā'u dāhwatāhā waṣaf-
rā'u-l-'ashiyeta ka-l-'arārah.*

"White in the noonday, and clear yellow in the even like the '*arārah*.'"

v. 5. More literally, "Months passed away, and we marked neither the full moons nor the new moons thereof."

Nejd, "the Upland," is the whole of that portion of Arabia which lies, on the south, west, and east, inland from the mountain barrier which separates it from the lowland by the coast (called Tihāmeh on the western shore): on the north the mountains of Ṭayyi' are included in, and form the limit on this side of Nejd. Though a great part of this area is desert during the rainless season, in the spring it is covered with verdure, and affords excellent pasture.

XVI.

قال آخ

مَتَّعَ بِهَا مَا سَاعَفْتِكَ وَلَا تَكُنْ عَلَيْكَ شَجًّا فِي الْخَلْقِ حِينَ تَبِينُ
وَأِنْ هِيَ أَعْطَتْكَ اللَّيْلَانَ فَأَنْهَا لَغَيْرِكَ مِنْ خُلَانِهَا سَتَلِينُ
وَأِنْ حَلَفْتُ لَا يَنْقُضُ النَّأْيُ عَهْدَهَا فَلَيْسَ لِمَخْضُوبِ الْبَنَانِ يَمِينُ

One unnamed.

Yea, take thy fill of joy with her what time she yields her love to thee,
and let no grieving stop thy breath whenas she turns herself to flee.
Ah, sweet and soft her ways with thee: bethink thee well: the day
shall come
when some one favoured e'en as thou shall find her just as sweet and
free.
And if she swear that absence ne'er shall break her pact of plighted
troth,
— when did rose-tinted finger-tips and binding pledges e'er agree?

Ham. p. 575.

NOTES.

Metre *Tawil*, third form, as in No X.

v. 1. "Grieving": *shejā* is properly a bone or anything else that sticks in the throat and chokes one.

v. 3. "Rose-tinted finger-tips," *makhḍūb-el-benān*. The Arab women tinge the ends of their fingers with *hinā* (*Lawsonia inermis*).

XVII.

قال توبة بن الحمير

كُوْ أَنْ لَيْلَى الْأَخْيَلِيَّةِ سَلَمْتُ عَلَى وَدُونِي تَرْبَةً وَصَفَائِي
لَسَلَمْتُ نَسْلِيمَ الْبُشَاشَةِ أَوْ زَقَا إِلَيْهَا صَدَى مِنْ جَانِبِ الْقَبْرِ صَائِي
وَأَغْبُطُ مِنْ لَيْلَى بَعَا لَا أَنَالَهُ أَلَا كُلَّمَا قَرَّتْ بِهِ الْعَيْنُ صَالِي

Taubeh son of el-Homeyyir.

Ah if but Leylā once would send me a greeting down
 of grace, though between us lay the dust and the flags of stone;
 My greeting of joy should spring in answer, or there should cry
 toward her an owl, ill bird that shrieks in the gloom of graves.
 They envy me that from Leylā never was mine from her :
 how slight be the cause of joy soever, how good it is !

Ham. p. 576.

NOTES.

Metre *Tawīl*, as in No. II. The first line in both Arabic and English is *Makhrām*, that is, deprived of its initial short syllable.

Much is told of this Taubeh in the *Kitāb-el-Aghānī* (x. 67—82). He was a cousin of Leylā, a woman of great beauty, belonging to the family of el-Akhyal (hence called Leylā-l-Akhyaliyyeh), of the tribe of 'Āmir son of Ša'sa'ah. Taubeh loved her from her childhood, when they were children in the desert together, but her father refused to give her to him in marriage. He led a stormy life, and met his death in fight in the reign of Mo'āwiyeh, the first of the Umawi Khalifehs. Leylā long survived him, but never forgot him and his love for her. She also was a renowned poetess, and was alive at a great age in the reign of 'Abd-el-Melik son of Merwān. A tale is told of her death in which these verses figure (Agh. x. 82). She was making a journey with her husband, when they passed by the grave of Taubeh. Leylā, who was travelling in a litter, cried "By God! I will not depart hence till I greet Taubeh." Her husband endeavoured to dissuade her, but she would not hearken: so at last he allowed her. And she went up the mound on which the tomb was, and said—"Peace be to thee, O Taubeh!" Then she turned her face to the people, and said—"I never knew him to speak falsely until this day." "What meanest thou?" said they: "was it not he," she answered, "who said—

'Ah, if but Leylā once would send me a greeting down
 of grace, though between us lay the dust and the flags of stone,
 My greeting of joy should spring in answer, or there should cry
 toward her an owl, ill bird that shrieks in the gloom of graves'?

Nay, but I have greeted him, and he has not answered me as he said." Now there was a she-owl crouching in the gloom by the side of the grave; and when it saw the litter and the crowd of people, it was frightened, and flew in the face of the camel. And the camel was startled, and cast Leylā down headlong on the ground; and she died that hour, and was buried by the side of Taubeh.

v. 1. *Šafāih* are the flags of stone set over a grave.

v. 2. The pagan Arabs had a strange and gloomy superstition, which survived long after the days of el-Islām, though expressly denounced as baseless by the Prophet himself, that the spirits of dead men became owls, which dwelt in the graves where their bodies were laid. 'Ṣadā or hāmeḥ, the names for an owl, thus came to mean the ghost of a dead man; and a common proverbial saying in the mouth of an old man was "I shall be an owl to-day or to-morrow" (this was used even by so pious a Muslim as Lebīd in his old age under Mo'āwiyeh). Some say that only the souls of those slain unavenged became owls, and that they flew at night about the grave, crying *usqūnī, usqūnī*—"give me to drink!" When the blood of vengeance was poured forth, they were appeased and ceased to cry. That some such notion prevailed is clear from many passages, *i. e.*, that the owl or ghost was tormented by a perpetual thirst, which required to be assuaged with blood or wine (see No. XVIII in the present series): but it is equally certain that it was not only those who were slain unavenged who were believed to become owls, but that "owl" was the common word for all ghosts.

v. 3. *I. e.*, "they envy me Leylā's love: but I never obtained it. Nevertheless, that my name is coupled with hers is in itself a joy to me, and good, however slight a thing it be." *Kullumā qarret bihi-l-'eyn*, literally: "everything which brings coolness to the eye." *Qarrat el-'eyn*, "coolness to the eye," is a common expression for gladness.

XVIII.

قال آخر

بَلِيلِي أَمْتُ لَا فَبِرْ أَعْطَشُ مِنْ قَبْرِ	فَيَا رَبِّ إِنْ أَهْلَكَ وَلَمْ تَرَوْعَامَتِي
تَسَلَّيْتُ عَنْ يَأْسٍ وَلَمْ أَسْلُ عَنْ صَبْرِ	وَإِنْ أَكْ عَنْ لَيْلَى سَلَوْتُ فَإِنَّمَا
فَرُبَّ غُذِي نَفْسٍ قَرِيبٍ مِنَ الْفَقْرِ	وَإِنْ يَكْ عَنْ لَيْلَى غُذِي وَنَجَلَهُ

Another, unknown.

O God, if I die, and Thou give not to mine owl to drink
of Leylā, I die, no grave lies thirstier than my grave!
And if I forget my pain though Leylā be not for me,
my Comforter is Despair: no comfort does Patience bring.
And if I suffice myself without her, seem strong and stern
—ah many the strength of soul that lies near to lacking'sore!

Ham. pp. 541-2.

NOTES.

The first form of the *Tawīl*, as in No. VI.

One would gladly know the author of these passionate lines: but too many of the fragments in this Book of the *Ḥamāsch* (No. IV, "Love pieces,") are anonymous. It seems probable that he lived in the days of paganism, although, as just mentioned (Notes to No. XVII), the superstition to which reference is made in v. 1 was by no means extinct under el-Islām. The translation is as nearly as possible word for word.

v. 1. See note to v. 2 of No. XVII. Here the poet, looking forward to his own death of love for Leylā, prays that his owl's thirst may be appeased by her blood.

v. 3. The play upon *ghinā*, "wealth," "strength," and *fuqr*, "poverty, lacking," is difficult to render in English.

XIX.

قال ابو صخر الهذلي

أَمَاتَ وَأَحْيَا وَلَدَيَّ أَمْرَهُ الْأَمْرُ	أَمَّا وَالَّذِي أَبْكِي وَأَضْحَكُ وَالَّذِي
أَلَيْفَيْنِ مِنْهَا لَا يَرُوعُهُمَا الذَّعَرُ	لَقَدْ تَرَكْتَنِي أَحْسَدُ الْوَحْشِ أَنْ أَرَى
وَيَا سُلُوكَ الْأَيَّامِ مَرُوعَدِكَ الْخَسَرُ	فَيَا حُبَّهَا زِدْنِي حَوَى كُلِّ لَيْلَةٍ
فَلَمَّا انْقَضَى مَا بَيْنَنَا سَكَنَ الدَّهْرُ	عَجِبْتُ لِسَعْيِ الدَّهْرِ بَيْنِي وَبَيْنَهَا

Abū Ṣakhr el-Hudālī.

By Him who brings weeping and laughter,
 Who deals Death and Life as He wills—
 She left me to envy the wild deer
 that graze twain and twain without fear!
 O Love of her, heighten my heart's pain,
 and strengthen the pang every night!
 O Comfort that days bring, forgetting—
 the Last of all days be thy tryst!
 I marvelled how busy the World wrought
 to sunder us whiles we were one:
 But when that which bound us was broken,
 then did the World rest, his work done.

NOTES.

Metre *Tawil*, first form, as in No. VI.

Abû Şakhr of Huḡeyl, the author, was a poet of the early days of el-Islâm, chiefly renowned as a writer of erotic poetry.

v. 1. The force which the repetition of *alladî* here gives to the original can hardly be adequately rendered in English. I have attempted to represent it by extreme concision, and thus, while the last two verses of the poem are rendered by four short lines each, the first two have only two lines apiece. The following is a literal translation of the latter:—

“Yea, by Him who brings weeping and laughter—by Him

who slays and brings to life—by Him whose command is the only power!

Verily she left me to envy the wild creatures of the field, when I see

a pair of them wandering together, with no fear to terrify them!”

v. 3. Here the translation is as nearly as possible literal. “The last of all days,” *el-Ḥaṣhr*, is the Day of the Resurrection.

v. 4. This verse is susceptible of two interpretations, depending on the various meanings of *ed-dahr* and *sa‘à*. The former may either mean “the World,” that is, the people of the World, the worldlings, or it may be rendered “Time”; and the latter may mean “to be busy, to work actively,” or “to run.” If the former interpretation be chosen, the rendering I have given above will express the sense—“I wondered how actively those unkindly ones about us worked to part us: but when they succeeded, then their activity ceased.” If the latter, the meaning is—“I wondered how swiftly the time sped between me and her while we were united: but when the space of our union came to an end, then Time seemed to have ceased to move at all”; or, metrically—

“I marvelled how swiftly the time sped

between us the moment we met:

But when that brief moment was ended,

how wearily dragged he his feet!”

XX.

قال آخر

قَدْ كُنْتُ أَعْلُو الْحَبِّ حِينَا وَلَمْ يَزَلْ	بِيَ النَّقْصُ وَالْإِبْرَامُ حَتَّى عَلَانِيَا
وَلَمْ أَرِ مِثْلَيْنَا خَلِيلِي جَنَابَةٍ	أَشَدَّ عَلَى رَغْمِ الْعَدْرِ تَصَافِيَا
خَلِيلَيْنِ لَا نَرْجُو لِقَاءً وَلَا تَرَى	خَلِيلَيْنِ إِلَّا يَرْجَوَانِ التَّلَاقِيَا

One unnamed.

Love's master was I once and free : but evermore his strength be bent
 to bind me fast, and I to loose, till in the end he mastered me.
 And never saw I like us twain two lovers sundered, she from me,
 and I from her, true-hearted still and faithful, spite of all men's hate
 — Two friends that have no hope of converse, meeting never face to face :
 where hast thou seen two loving hearts that looked not for the day of
 joy ?

Ham. p. 551.

NOTES.

Metre *Tawil*, second form, as in No. II.

The first line of this poem is not rendered by Rückert in his version of the *Hamāseh*, as being impossible to express fully in German. The difficulty lies in the words *en-naqd* and *el-'ibrām*, the former of which means the untwisting of the strands of a rope, and the latter the twisting of them tight. The verse therefore means—"Love strove with me to twist tight my bonds, while I strove with him to untwist and relax them. I was his master at the beginning, but in the end he prevailed over me."

v. 3. *I. e.* "We are lovers who have no hope of delight one in the other: and hardly shalt thou see two lovers who look not some day to be joined together. Yet we are firm and faithful in our love, though we have no hope."

XXI.

قال بكر بن النطاح

بَيْضَاءُ تَسْجُبُ مِنْ قِيَامٍ فَرَعَهَا وَتَغِيبُ فِيهِ وَهْوَحَفُ أَسْحَمِ
 فَكَانَهَا فِيهِ نَهَارٌ سَاطِعٌ وَكَانَتْهُ لَيْلٌ عَلَيْهَا مُظْلِمٌ

Bekr son of en-Natṭāḥ.

A white one : she rises slow, and sweeps with her hair the ground :
 it hides her within its coils, a billow of blackest black.
 She shines in its midst like Dawn that breaks from the farthest East :
 it bends like the darkest Night and veils her above, around.

Ham. p. 566.

NOTES.

The metre is the *Kâmil*, as in No. IX. The English, however, follows the *Tawil*, of the second form.

Bekr son of en-Nattâh was a man of Hanîfeh, and a native of el-Yemâmeh: For some time he robbed on the highway, but was induced by Abû Dulaf, a minister of the 'Abbâsî Khalîfehs, to enter the army, where he shewed great valour. He was thus a late poet, and when he died, says Abû Hiffân, poesy came to an end for ever. Abû Dulaf, his patron, died in A. H. 226.

XXII.

قال نصيب

كَأَنَّ الْقَلْبَ لَيْلَةً قَدِ يَغْدَى بَلِيلَى الْعَامِرِيَّةِ أَوْ بِرَاحٍ
قَطَاةٌ عَزَهَا شَرَكُ فَبَاتَتْ تَجَاذِبُهُ وَقَدْ عَلَقَ الْجَنَاحُ
لَهَا فَرْخَانِ قَدْ تَرَكَا بِرُكْرِ فَعَشِيَّتَهَا تُصَفِّقُهُ الرِّيَّاحُ
إِذَا سَمِعَا هُبُوبَ الرِّيحِ نَصَا وَقَدْ أَرْدَى بِهَا الْقُدْرُ الْمُتَاحُ
هَ فَلَا فِي اللَّيْلِ نَالَتْ مَا تُرْجَى وَلَا فِي الصُّبْحِ كَانَ لَهَا بَرَّاحُ

Nasīb.

They said last night—'To-morrow at first of dawning
or may be at eventide Leylâ must go.'

My heart at the word lay helpless, as lies a Qatâ
in net night-long, and struggles with fast-bound wing.

Two nestlings she left alone in a nest far distant,
a nest which the winds smite, tossing it to and fro.

They hear but the whistling wind, and stretch necks to greet her:
but she they await—the end of her days is come!

So lies she, and neither gains in the night her longing,
nor brings her the morning any release from pain.

Ham. pp. 577-8.

NOTES.

Metre *Wāfir*, as in No. III. The English follows the original measure, save in making the second hemistich catalectic.

Nuṣayb was a negro slave, the property of a man who lived in Wādi-l-Qurā, not far to the East of el-Medīneh. He covenanted with his master to buy his freedom (in Freytag's text, for *kānet 'alā nefsīhi*, read *kātaba 'alā nefsīhi*), and having done so, repaired to the Khalifeh 'Abd-el-'Aziz ibn Merwān, whom he praised in an ode. In requital therefor 'Abd-el-'Aziz gave him the purchase money wherewith to redeem himself, and gifts besides. He excelled in erotic and laudatory poetry.

v. 2. "A Qatā." The Qatā is the sand-grouse, a well-known bird of the Arabian Deserts, constantly recurring in old Arab poetry, and the subject of innumerable proverbial sayings.

The revenues of the Mughal Empire in India.—By EDWARD
THOMAS, F. R. S., *Late Bengal C. S.*

Indian Numismatists are greatly indebted to Mr. C. J. Rodgers of Amritsar for his contributions of coins "supplementary to the Chronicles of the Pathān Kings of Delhi,"* and for the careful illustration of the new specimens, by his own hand, which have lately appeared in our Journal.

In his last paper in Part I, Vol. XLIX, 1880, p. 213, on the "Copper coins of Akbar," Mr. Rodgers has entered into some speculations on the amount of the State Revenue of that monarch, based upon novel interpretations of the legends on the coins he describes, which seem to me to be open to criticism. I am the more bound to notice these readings and the deductions involved, as they touch a subject of much importance in the Fiscal history of India, which I have endeavoured to elucidate in a separate publication on the "Revenue resources of the Mughal Empire."†

I cannot claim that this work was received with much favour, on its first appearance, the returns contrasted so strikingly with the lesser totals obtained from the land in our day, that there was an intuitive tendency to suspect errors in my figures and calculations.‡ However, as Mr. W. W.

* Trübner, London, 1871, 8vo., pp. xxiv. 467.

† Trübner, London, 1871, 8vo., pp. 54.

‡ Sir H. Elliot, one of our most experienced Settlement Officers under Martin Bird, in his investigation into the revenues past and recent of the province of Sind, was equally startled to find how little the British Government obtained from that fertile land, in comparison with the income of their Native predecessors. He remarks (p. 473, Vol. I, Dowson's Edit. *Historians of India*) "Under the Tālpūrs * * Sind is said to have occasionally yielded £400,000; and under the Kalhoras, tradition represents the revenue at the exaggerated amount of £800,000. At present (A. D. 1855), with security on all its borders, and tranquillity within them, it does not pay to the British Government more than £300,000, and the expenses have hitherto been double that sum."

Hunter remarked in 1872.* “Several attempts have been made in India to controvert Mr. Thomas’s figures, but so far without success.” And in his latest Lectures on “England’s work in India,”† the “Director-General of Statistics to the Government of India,” embodies them without question in his text, as a basis of comparison with the existing revenues of British India, and adds “indeed, the difficulty of a comparison has arisen not from the absence of information in respect to the Mughal revenues, but for want of exact statements regarding our own.”

Mr. Clements Markham, to whom H. M.’s Indian Government entrusted the task of compiling the successive Reports on the Indian Surveys, in like manner, seems to have fully satisfied himself as to the soundness of my data, which he quotes, in all faith, in his special notice of Akbar’s fiscal policy.‡

On the other hand, there have been criticisms and contentions enough, none of which seem to me to go so thoroughly into the details of a complicated subject, as to require more than a passing notice.§

I reproduce the general summary of the results obtained by me in 1871, from various and completely independent sources.

I have no wish whatever to claim for them finality, but they fall in epochally with probabilities, and I shall be the first to welcome any new lights, by whomsoever discovered.

* Orissa. Smith, Elder and Co., 1872, Vol. II, p. 275.

† Smith, Elder, 1880, p. 104.

‡ Akbar, an Eastern Romance * * with notes and an introductory life of the Emperor Akbar by C. R. Markham, C. B., F. R. S. W. H. Allen and Co., 1879, pp. xxvi, xxxiii, and 106.

§ I scarcely know how to reply within reasonable space to Mr. H. G. Keene’s criticisms in his “Turks in India” (Allen, 1879), they are so discursive; but, the main point of difference between us seems to be the relative reliance to be placed on the returns of the *Ain-i-Akbari*, as against those of Nizám-ud-dín Ahmad. The former were avowedly progressive as new official details came in, and the grand total (in the case I examined) did not accord with, or come-up-to the divisional totals embodied in the same schedule; the method of reckoning was also, to a certain extent, arbitrary, i. e., by 40 *dáms* to the *rupee*, the latter a coin only recently introduced, and whose absolute divisional money representative, or $\frac{1}{40}$ th in copper, is still a doubtful quantity. I may add, with reference to the *dám* of account, that Prof. Wilson in his Glossary of Indian terms, informs us that, the 40 *dáms* to the Rupee of Akbar’s time, came to be $46\frac{1}{3}$ rd under ‘Alamgir and even 80 to 90, at later periods. Whereas, on the other hand, Nizám-ud-dín, a master of finance, defined his returns in Sikandari *Tankas*, the current coin in which the Settlement of Sikandar Lodi had been framed. Mr. Keene, at p. ix, takes objection to my estimating the *rupee* at 2 shillings, this was merely done for facility of conversion, but every available testimony goes to prove that the exchange value of the fine silver *rupee* was, in those days, far higher than 2/.

RECAPITULATION OF THE AMOUNT OF THE REVENUES OF THE MUGHAL
EMPIRE AT VARIOUS PERIODS, WITH THE AUTHORITIES
FOR THE RETURNS.

MUGHAL EMPERORS.	AUTHORITY.	Land Revenue.	Revenue from all sources.
1. Akbar, A.D. 1593 ..	Nizám-ud-dín Ahmad ..		£ 32,000,000
2. " A.D. 1594 ..	Abúl Fazl, MSS.	£ 16,574,388	
3. " " ..	Official documents	16,582,440	
4. " A.D. 1605 ..	Indian authorities quoted by De Laët	17,450,000	
5. Jahángír, A.D. 1609-11	Captain W. Hawkins ..		50,000,000
6. " A.D. 1628 ..	Abd ul Hamíd Láhóri..	17,500,000	
7. Sháh Jahán, A.D. 1648-9	Ditto	22,000,000	
8. Aurangzéb, A.D. 1655	Official documents { Gross, 26,743,970 Nett, 24,056,114 Later official documents* { Gross, 35,641,431 Nett, 34,503,890		
9. " " ..	Gemelli Careri		80,000,000
10. " A.D. 1695	Mannucci (Catron)	38,719,400 (× 2 =)	77,438,800
11. " A.D. 1697	Ramusio	30,179,692	
12. " A.D. 1707			

Mr. Rodgers proposes to reduce by a summary process my total No. 1, of Nizám-ud-dín, from £32,000,000 to £3,200,000. The data for this alteration are, unfortunately for his argument, fundamentally erroneous. He has figured two coins of Akbar, in his Plates, bearing upon this division of his proofs.

No. 27 weighing 40 grains of copper, which he reads correctly as *دَمْرِی* (one) *damrí*. A second coin of a similar character No. 4, weighing 76 grains of copper, he reads incorrectly as *دَام* *dám*, and he proposes to identify the coin as the representative of *the* *dám* or $\frac{1}{40}$ th of the rupee of Akbar's revenue system.

I need scarcely follow his method of calculation whereby he seeks to justify the reduction above-named, as there is a much more simple way of disposing of the question. Tested by his own interpretation of the legend on No. 27, the letters on No. 4 can only be read as *دَمْرَا* *damrá*,† i. e., a double *damrí*,‡ and have nothing whatever to do with the long-sought piece of the money of account.

His second basis of calculation depends on the import of the word he transcribes as *tánke*, inscribed on his coins Nos. 1, 2, 3. The definitions

* 5 per cent., allowed for collection.

† The final *ʿ* *mim*, on the Mughal coins is marked in its down stroke. This supposed *ʿ* has a subjunct *e*.

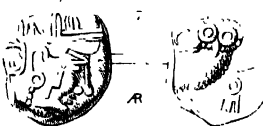
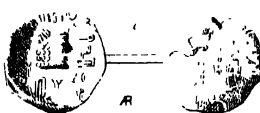
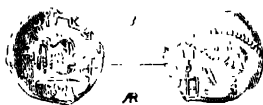
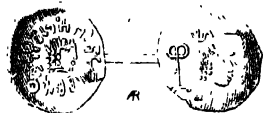
‡ *دَمْرِي* *damrí* from *दामा* *drama*, $\frac{1}{4}$ of a *paisa*,—*دَمْرَا* *damrá* gold, silver, riches. *दामा* *drama*, Gr. *δραχμή*.

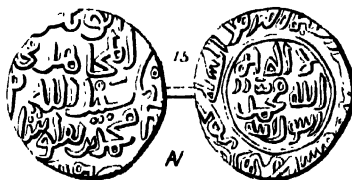
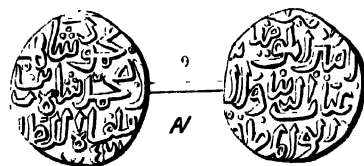
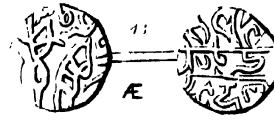
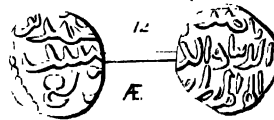
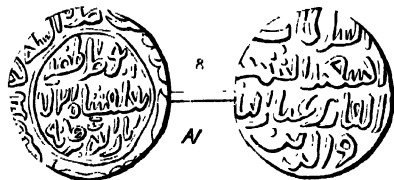
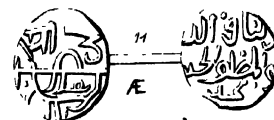
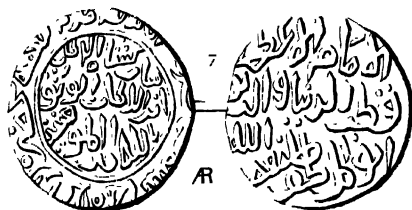
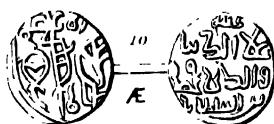
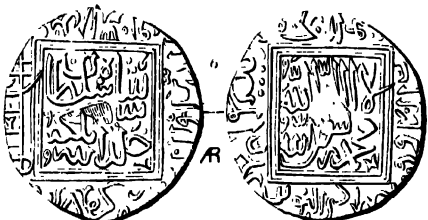
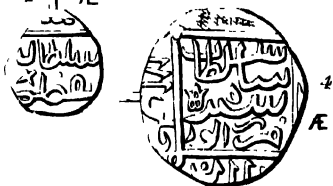
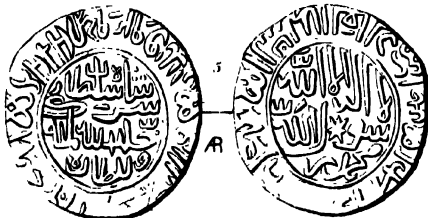
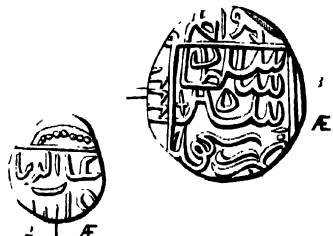
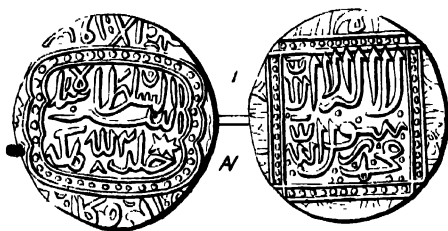
of value on these pieces result in an average weight, in copper, of something over 55 grains. Mr. Rodgers thereupon proceeds to infer that as "the total revenues of Akbar are put down by Nizám-ud-dín at 640,00,00,000 *tánkes*. This at the rate of 200 to the ^{*}rupee would be equal to 3,20,00,000 rupees or £3,200,000."

In this instance, also, the argument is founded on a palpable fallacy. There were both gold and silver تَنكَاہ *tankaḥs** which constituted the early currency of the Patháns, each of which were of the identical weight of 175 grains. But the *Tánk* (or *dáng*), as I was careful to point out (p. 408, my *Pathán Kings*), had nothing to do with the *Tankaḥ*. I was also able to determine that the former was the surviving equivalent of the *Purāṇa* of Manu, weighing 32 *Ratis* or 56 grains; in short the دَنق (Arabic *dánq*) *dáng*, which Bábar himself remarked, was still used, in his days, to weigh "jewels and precious stones," and which he enters in his own Table of weights as equivalent to 32 *Ratis*.†

* The Persian Historians designate the coins in these two metals as *Tankaḥs*. The word on the gold pieces is سَلَكَاہ *Silkaḥ* in its generic sense.

† Leyden's *Memoirs of Bábar*, p. 332, My *Patháns*, p. 222.





JOURNAL

OF THE

ASIATIC SOCIETY OF BENGAL.

Part I.—HISTORY, LITERATURE, &c.

Nos. III & IV.—1881.

Relics from Ancient Persia in Gold, Silver, and Copper.—By Major General A. CUNNINGHAM, C. S. I., C. I. E., Director General Archaeological Survey.

(With nine Plates.)

In the year 1877, on the north bank of the Oxus, near the town of Takht-i-Kuwât, opposite Khulm and two days' journey from Kunduz, there was found a large treasure of gold and silver figures, ornaments and coins, most of which have been brought to India for sale. The site is also called Kavat and Kawadian, and I have no doubt that it is the Kobadian. The finders quarrelled about the division of the spoil, and several of the larger objects were cut to pieces for the sake of a ready settlement of accounts on the spot. Two of the most interesting objects, a horseman and a chariot, both of gold, were presented to Lord Lytton by Sir Louis Cavagnari. Most, if not all, of the remaining objects of the first find have come into my possession. The coins have been scattered. Several have gone to the British Museum, and many have passed into the hands of various collectors; but a large number have come to Mr. A. Grant and myself. I believe that I have *seen* most of them, as both dealers and owners have sent to me either the coins themselves or impressions of them for identification. The coins, so far as I have seen of them, range over a period of about three hundred years, from the time of Darius to that of Antiochus the Great and Euthydemus of Bactria. The gold and silver figures seem also to belong to different ages, as some are decidedly very archaic; more particularly the small statuette of a king in silver, which I think may be as old as the time of Darius.

It is perhaps rather bold to speculate as to how this large treasure came to be hidden. It was not found all in one spot; but scattered about in the sands of the river. One may therefore conjecture that it may have been concealed in the bank either in wooden boxes, or in vessels of earthenware, which fell to pieces when the swollen stream cut away the bank and scattered their contents over the sands.

If I am right as to the age of the latest coins, the treasure must have been buried about the time of Antiochus the Great and his contemporary Euthydemus of Bactria, as not even a single specimen of either Demetrius or Eukratides has yet turned up. Now we know that Bactria was invaded by Antiochus in B. C. 208. Euthydemus took up a position near Tagouria with an advanced post on the River Arius defended by ten thousand cavalry. In the battle which followed, Euthydemus was defeated, and being disheartened he "retreated to Zariaspa, a city of Bactriana, with all his army." I quote the following from my account of this campaign in the *Numismatic Chronicle*.

"In marching from Hyrkania to Bactria, Antiochus must have followed the high road along the valley of Meshed to the fort of Muzdarân, which stands on an isolated spur of table-land at the entrance of the Darband Pass.* This is the place which I suppose that Antiochus was besieging when he heard that Euthydemus was encamped at Tagouria, only three days' march distant, and that a body of cavalry was prepared to dispute the passage of the Arius River. Antiochus at once raised the siege, and resolved to cross the river, and advance against the enemy. For the first two days he moved slowly, but on the evening of the third day, leaving the main body behind, he made a forced march with all his cavalry and light-armed troops. As the country was level, and easy for the march of cavalry, he reached the banks of the River Arius and crossed it before dawn. Now the road through the Darband Pass leads direct upon the town of Sarakhs, which lies to the east of the Tejend, or Arius River, at forty-five miles distance from Muzdarân. The nature of this road also corresponds exactly with the account of Polybius; as Burnes describes the route for the eighteen miles to the south-west of Sarakhs, as lying "over a level country, broken in some places by gravelly hillocks."† Sarakhs itself must therefore be the city to which the Bactrian cavalry retired at night; and Tagouria, where Euthydemus was encamped, may be looked for somewhere along the line of the Murghâb, or Margus River, in the neighbourhood of Maru-ur-Rûd, or Alexandria Margiane."

"Wilson thinks that Euthydemus showed little courage or conduct‡ in retiring at once so far back as Balkh, and he therefore infers that Zarias-

* Burnes' *Travels*, iii, 59.

† Burnes' *Travels*, iii, 58.

‡ *Ariana Antiqua*, p. 221, note.

pa should rather be in the situation of Maru and Andkoh. But the identification of Zariaspa with Bactria or Balkh seems to me to be too well established by the direct testimony of Ptolemy, as well as by the coincidence of its name with Azergashasp or Azerasp, the famous fire-temple of Balkh, to be set aside by any reasoning founded on mere opinion. I disagree also with Wilson in thinking that Euthydemus would have shown good judgment in retiring upon Maru; for Maru stands on the edge of the desert, so that his further retreat would have been cut off, and he would have been compelled either to fight or to submit, and in such a position a defeat would have been fatal. By retiring upon Balkh there were two lines of retreat open to him; either northward into the mountains of Sogdiana, or eastward up the valley of the Oxus. By taking up this commanding position in front of his capital, Euthydemus forced his antagonist to come to terms."

Zariaspa has been generally accepted as only another name for the old capital of Balkh, which was derived from its famous fire-temple of Azergashasp, or Azer-i-asp. I conclude that the treasure may have been hidden shortly before the defeat of Euthydemus, by some one who went to join the army on the Arius River and did not return to recover it. And there it has lain on the bank of the Oxus for upwards of two thousand years, whilst Parthians and Scythians, Sassanians and Arabs, Turks and Mughals have in turn swept over the country and crossed the river within a few miles of the hidden treasure.

I have arranged the principal objects of this curious discovery in six Plates according to their subjects, followed by two Plates of coins, and a single Plate of bronze objects from Sistân, or Drangiana, which also formed a part of the Ancient Persian empire of the Achæmenidæ. Before discussing the varieties of dress and arms and ornaments brought to light in these curious relics, I think it best to give a brief description of the objects represented in the different Plates.

Plate XI. *Royal Statuette.* Solid silver, full size, weight 5,791 grains. In my own possession. The figure is represented in two views, both front and back. The upper part of the dress is bordered with broad bands of gold ornament let into the silver, with a similar gold band down the front of the long tunic. The diadem is fastened near the top of the head dress or tiara, with its broad ends hanging conspicuously at the back of the head.

Plate XII. *Royal Figures.* Thin gold, full size, weight 84 grains. Author.

No. 1. Standing figure with crown on head, right hand up-raised and left hand carrying a flower. Author.

No. 2. Gold Ring, weighing 272 grains. Author. Crowned figure of king seated on a chair—holding a bird on his right hand and a flower in his left.

No. 3. Double Daric, gold. Author. The type is the same as that which is so well known on the single Darics. The king, crowned and resting on his right, knee carries a bow in his outstretched left hand, and an arrow in his right.

No. 4. Silver coin. Author. This rare coin is of the same type as the gold Darics and silver Darics, but its weight is only two-thirds of that of the silver Daric or *Siglos*. This proves that the silver *Siglos* was divided into six parts, which as I will hereafter show were called *danakē*, in Greek *δανάκη*.

No. 5. Silver coin. Author. The king crowned and kneeling as on the coin just described. In his left hand the usual bow, and in his right a long spear, with a heavy knob at the end. In the field the Greek letters Δ H.

No. 6. Large silver coin, weighing 407½ grains. Author. Archaic type; crowned king in chariot drawn by four horses.

No. 7. Large silver coin weighing 400 grains. Author. Similar types.

I have seen four specimens of the former, and six of the latter type, brought from the Oxus find. These coins are usually named Persian octodrachms, but I believe that they should rather be called Pentasiglons, or Quarter Darics, as I will show hereafter. I have placed them here for the purpose of illustrating the following figure.

No. 8. Gold; full size; king and driver in chariot. Weight 368 grains. Lord Lytton. Horse gold, 96 grains. Author.

In the plate the wheel has been added from that shown on the large silver coins. The driver in spite of his shortness is standing, while the tall king is sitting, with a spear in his hand, on a seat running from front to rear, and not across the chariot. The reins of thin gold wire still cling to the driver's hands, while a similar gold wire forms the head-gear of the horse. The figures are all hollow, having been formed in two pieces, and afterwards joined rather roughly.

I understand that a much larger chariot with wheels and horses complete, including also a king and a charioteer, was found last year and sent to England, where it was sold for a large sum. I was not allowed even to see it.

Plate XIII. *Statuettes.*

No. 1, front view, and No. 2, side view, of a gold figure, full size, weighing 1063 grains. Lord Lytton. The figure is nearly solid, and must have been originally mounted on horseback, as shown by the position of the legs and hands. I take it to be a royal personage partly from the embroidered tunic, and partly from the tall head-dress, which was peculiar to the kings of Persia.

No. 3, solid silver statuette, half size, weighing 28,282 grains, or nearly 59 ounces. Author. The figure is naked, with the exception of the head which is covered with a tall flat-sided cap, very like that of the rider shown in No. 1; but without the flaps.

● No. 4, head of a horse nearly solid, in gold, full size, weighing 673 grains. Author. This statuette was entire when found; but the finders having quarrelled about the division of their treasure, the horse was cut in pieces with a chisel, some marks of which may be seen both on the neck and the cheek. It is said to have been nearly 6 inches long.

Nos. 5 and 6. Side and front views of the head dress of the last Râjâ of Ladâk, to illustrate the tall cap of the naked silver figure. The upper part of the cap was of black velvet, rimmed with a band of sky blue silk, embroidered with gold.

Plate XIV. *A Magus or Priest.*

Gold Plaque, full size, weighing 624 grains. Author. The figure will be described presently.

Plate XV. *Animals.*

No. 1. Winged bull, full size, weighing 134 grains. Author. At the back of the Plate there are several small eyelet holes for securing it to some back ground.

No. 2. Small eagle, full size, in solid gold, weighing 13 grains. Author.

No. 3. Small pigeon, full size, in hollow gold, weighing 24 grains. Author. This figure has small eyelet holes below.

No. 4. Small square gold plaque, full size, weighing 26 grains. Author. Figures of man and lion in archaic style.

No. 5. Gold ring, weighing 60 grains. Horse running to left. Author.

No. 6. Gold stag, full size, weighing 385 grains. Author. The stag had branching antlers, of which one is altogether gone, and the other broken off just above the lowermost tire. From some marks about the feet it would appear to have been fastened to a flat plate, like the sheep in the next figure.

No. 7. Gold sheep, full size, weighing 924 grains. Author. The figure is fixed to an oblong plate which is pierced with small holes all round the four sides for the purpose of securing it firmly, either by rivets to the crest of a metal helmet, or by sewing it to the top of a felt head-dress. Or, perhaps both the stag and the sheep may have been the crowning figures of military or royal standards.

No. 8. Gold fish, half size, weighing 5,687 grains or nearly 12 ounces. Author. This figure is $9\frac{1}{4}$ inches in length, and was most probably the

crest of a royal standard, as the *Mâhi Marâtib* or "Fish standard" has come down even to our own times as one of the symbols of high position, if not of royal rank. Thus the king of Oudh had two fishes carved on the gateways of his palace, and also placed a fish on his coins. One of the privileges said to have been granted by Kutb-uddin, the first Muhammadan king, to the Hindu Princes was the right of hoisting the royal fish standard or *Mâhi Marâtib-kino*, as it is expressed in the books of Mukji the famous bard of the Khichî Chauhâns.

Plate XVI. *Ornaments.*

No. 1. Earring of solid gold, full size, 48 grains. Author. The pin which passed from the back of the head to the feet has been lost. The execution of this little figure is much superior in finish to most of the other objects.

No. 2. Large finger ring in shape of a coiled snake, 176 grains. Author.

No. 3. Small finger ring of similar design, 77 grains. Author. Both of these rings are of pale gold.

No. 4. Gold belt clasp, full size, weighing 486 grains. Author. There are two flat loops at the back for the belt to pass through. The youthful male head, crowned with a chaplet of ivy leaves, stands out in very bold relief. It differs, however, in its workmanship from most of the other objects, having been beaten up from behind, instead of being cast in a mould. It is therefore a very ancient specimen of repoussé work. I take the head to be that of *Dionysos Kissophoros*, or the "Ivy-crowned Dionysus," and that it must have been the work of some Oriental Greek about the time of Alexander the Great.

Bracelets.

All the specimens that I have seen were cut up by the finders, the plain middle pieces being consigned at once to the melting-pot, and only the ornamented ones kept for sale. The specimens in the Plate are all from my own collection.

No. 5. Gold bracelet, full size, ending in ram's head.

No. 6. ditto, full size, ending in dog's head (?)

No. 7. Spiral gold bracelet, full size, ending in lion's head. Some portions of the spiral coil being left attached to each end, I had the bracelet completed by a Simla goldsmith.

No. 8. Gold bracelet, full size, ending in lion's head.

No. 9. Gold bracelet, full size, ending in wild goat's head. The top view of the head is also shown, where it will be seen that the tips of the horns are made to join so as not to offer any points for catching in the dress.

No. 10. Gold bracelet, full size, ending in head of horned lion (?) The top view of this bracelet is also given.

•
Torques or Collars.

e No. 11. Two bull's heads in gold set upright, full size.

No. 12. Lion's head in solid gold, full size, weighing 336 grains. All my enquiries have failed to discover the companion piece. When complete this collar must have weighed about seven ounces. I understand that it was cut into several small pieces.

Dress of the Ancient Persians.

The king was distinguished from all his subjects by wearing an upright head dress, called *Kidarîs* or *Kitaris*, an oriental name which still survives in the Hebrew *Kether*. Curtius says "Cidarim Persæ regium capitis vocabant insigne." Plutarch also relates that Artaxerxes allowed his eldest son Darius, when he declared him his successor, to wear "the point of his *Kitaris* erect, as a mark of royalty." It was bound with a fillet called *Mitra*, which like the Greek *diadēma*, had the two ends hanging down behind the head. The Greek word itself was also introduced into Persia, most probably during the time of the Seleukidæ, and it still exists in Persian under the contracted form of *dehîm*, by the simple elision of the second *d*. All head dresses were called by the general name of *tiâra*, that of the king being distinguished by its upright form. Another term was *Kurbasia*, which would rather seem to be a foreign name, if, as I suppose, it contains the Tûrki word *bâsh*, or "head," the whole word meaning perhaps only "head covering."

A specimen of the upright *tiâra*, with the diadem is seen in the silver statuette in Plate XI. The same *tiâra* is apparently represented on the most ancient Persian coins, both of gold and silver, as seen on the different specimens in Plate II. But the head dress on the coins is almost invariably represented with a radiated crown on the top, which in figure 1 of Plate XII would seem almost to be separate from the *tiâra*, or head-dress proper. But perhaps the finest specimens of the *Kidarîs*, or upright tiara, are seen on the larger silver coins of Tigranes king of Armenia, on which the tiara is formed with a radiated upper edge. The *Kidarîs* itself was made of crimson cloth, with a diadem of sky blue spotted with a white star. So Curtius says "*Cærulea fascia albo distincta circumibat.*" So also the tall cap mentioned above as worn by the Râjâ of Ladâk has a sky-blue border.

The common *tiâra* was a soft felt cap, called *pilos* by the Greeks; but it differed from the Greek *pilos* in having long lappets which could be tied under the chin.* This is the cap worn by the drivers in the chariots in Plate XII; by the Satrap Tiridames on No. 5 coin of Plate XVII; by the Magus in Plate XIV, and apparently also by the king himself when out riding

* This fact is specially referred to by Juvenal, VI, 516.

or hunting, as shown in Plate XIII. But the caps worn by the Magus and the king are tall, the former only differing from the royal cap in the upper part being pressed downwards and backwards. The Satrap head-dress with its side lappets is fully displayed on the beautiful coin of Parnahazus published by the Duc de Luynes.*

The outer dress consisted of a sleeved tunic, a pair of light fitting trousers, and boots.

The tunic worn by all classes of Persians was a sleeved coat called *Kandus* or *Kanduké*, a name which appears to contain the Persian word *Kum*, or *Kam*, "a sleeve." It was also called *Sarāpis*, which may perhaps be only the Persian word *Sarāpā* "from head to foot," and if so, this term would rather apply to the Median robe, which reached down to the ground, than to the later Persian tunic. According to some the *sarāpis* was a striped tunic of crimson and white, *purpureæ tunicæ medium album intextum*.† But judging from the coloured dress of Darius in the Pompeian Mosaic, and from the dress of the golden statuette horseman in Lord Lytton's possession, the main part of the tunic was of scarlet, with a broad band of white down the front, and narrow bands along the edges of the sleeves and of the skirts.

The Persian trousers were of two kinds, "loose" and "tight." The former were called *sarabāra* or *saraballa*, a name which is still in use as *sarāwīl* and *sarawāl* for the very same garment. The light trousers were called *anaxurides*, in the plural. Xenophon calls them *ποικίλαι ἀναξίρυδες* which may mean either "embroidered" or "parti-coloured." The tight-fitting trousers or *anaxurides* are worn by Darius and most of the Persian chiefs, in the famous Pompeian mosaic representing the battle of Issus. They are also worn by the horseman in Plate XIII and by the seated Satrap Datames or Tiridames on the coin No. 5 of Plate XVII. I can find nothing about either their material or their colour, as I have not access to any coloured copy of the Pompeian mosaic.

The boots were of soft leather, and sometimes ended in long points, as seen in the gold statuette of Plate XII. But these long points were most probably confined to riding boots, as the king in Plate XI has square-toed boots, much like those of the present day, excepting only that they are highly ornamented.

Magus or Priest.

In Plate XIV we have a representation of the Magus or Priest as he stood in front of the fire altar for daily worship. The most minute account

* *Essai sur la Numismatique des Satrapies et de la Phénicie sous les Rois Achéménides.* Plato I, fig. 5.

† Curtius, *Vit. Alexand.* III. 3-7. The *medium intextum* agrees with the *μεσόλευκος* of the Greek writers. See also Xenoph., *Cyrop.* I. 3.2.

of the ancient Magi that has come down to us is that of Strabo, who had no doubt frequently witnessed the Magian worship. "The Persians" he says "have also certain large shrines, called *Pyrætheia*. In the middle of these is an altar, on which is a great quantity of ashes where the Magi maintain an unextinguished fire. They enter daily and continue their incantation for nearly an hour holding before the fire a bundle of rods, and wear round their heads high turbans of felt, reaching down on each side, so as to cover the lips and the sides of the cheeks." Here I think there must have been some mistake of the copyist, as Herodotus mentions that when all was ready, the Magus "chanted a hymn," which he could hardly do when his mouth was covered with the lappets of his head-dress.* The figure in Plate XIV certainly has his lips quite free. I think therefore that we might venture to change τὰ χεῖλα the "lips" to τράχηλον the "throat." Strabo's description would then tally exactly with the representation of the Magus on the gold plate, having both his *throat* and the sides of his cheeks covered by the lappets of his head-dress. The dress of the Magus was white according to Diogenes Laertius,† but nothing is said about its ornamentation, which is conspicuous in the Plate, both on the shoulders and round the edges of the tunic, which reaches only to the knees. He has a short sword on his right side, and holds the *barsom*, or "holy wand of twigs," in his right hand before him.

Strabo describes the sacrifices of the Magi in another place, where he says that "they continue their incantations for a long time, holding in their hands a bundle of slender myrtle rods." But in neither place does he mention in which hand the Magus held the barsom, or wand of twigs. This omission is very unfortunate, as the Parsi priests of the present day hold the sacred wand in the left hand, in utter disagreement with the ancient custom as represented on the gold plate. At first I thought it possible that the artist might have made a blunder in placing both the barsom and the sword on the right. But I see that the Persian soldiers given in Rawlinson's ancient monarchies wear exactly the same short swords on the right side.‡ It is clear therefore that the present practice of the Parsis is an actual departure from the custom of the Magi of old.

In *Æsna* 57, as published by Haug, I find the following passage regarding the *barsom*, or holy wand of twigs.§ "He who first arranged the bundle of sacred twigs (*barsom*), that with 3, that with 5, that with 7, and that with 9 stalks, those which were so long as to go up to the knees,

* Herodot. I. 132. Curtius also speaks of the Magi singing, III. 3.7.

† Ἑσθῆς μὲν λευκή quoted by Rawlinson, *Ant. Monarchies*, Vol. II, 347-2nd edition.

‡ *Ancient Monarchies*, 2nd edition, Vol. III, pp. 172-174, 176.

§ Haug's *Essays*, by West, p. 189.

and those which went as far as the middle of the breast, (he arranged them) to worship, to praise, to satisfy and to extol the archangels."

In his notes descriptive of Parsi ceremonies Haug gives the following detailed description of the holy wand. "The barsom consists of a number of slender rods or *tâi*, formerly twigs of some particular trees, but now thin metal wires are generally used. The number of these *tâi* depends upon the nature of the ceremony to be celebrated. For *Ijashnê* (*yazishn*) alone 21 *tâi* are required, for *Ijashnê* with *Vendidad* and *Visparad* 33 *tâi*, for *Yashti-Rapithwin* 13 *tâi*, for *Darûn Bâj* 5 *tâi*, or 7 when a priest becomes a *herhad*." In a footnote Dr. Haug adds—"According to other information the *Darûn Bâj* requires 7 *tâi* of double thickness, or 9 if performed in the house of a king or chief highpriest. In the *Nirangistân* it is stated that the barsom twigs may be cut from any tree whose trunk is sound, and that they should be from one to three spans in length and a barley-corn in thickness, and their number either 3, 5, 7, 9, 12, 15, 21, 33, 69, or 551, according to the circumstances of the ceremony."

The barsom carried by the Magus on the gold plate has only 5 twigs or rods, but I can nowhere find any statement as to the particular ceremony for which a wand of 5 twigs is required. All the authorities, from Anquetil du Perron downwards, are content with stating the fact that the number varies according to the character of the sacrifice performed. Gerson da Cunha, the latest writer, simply says that "in the ordinary *Darûn* ceremony only 5 wires are used."*

Arms and Ornaments.

Both Medes and Persians were fond of gold ornaments; and in the sculptures of Persepolis and Nakshi Rostam we see a profusion of ear-rings, finger-rings, bracelets, armlets, and collars or torques, of which numerous examples are found in the present collection. The only arms represented are the short Persian sword called *Akinakês*, on the Magus, in Plate XIV; and a spear in the hands of the king in the chariot, in Plate XII. On the coins, however, are seen both the bow and the shield.

Ear-rings are represented by a single specimen, Plate XVI, fig. 1, which I have already noticed as being of superior workmanship. It represents a naked male figure with his hands on his hips, and his body bent double. The figure is well proportioned and beautifully made. Arrian mentions gold ear rings set with precious stones as part of the treasures in the tomb of Cyrus at Pasargadæ: ἐνώτια χρυσοῦ τε καὶ λίθων κολλητὰ, Arrian, *Anabasis*, VI, 29.

Finger-rings are of two kinds, the coiled *snake* pattern and the *scal* ring pattern. Of the former there are two specimens in Plate XVI, the

* See Gerson da Cunha, in *Bombay Asiatic Society's Journal*, XIV, 6.

larger one weighing 176 grains, and the smaller one only 77 grains. Of the seal rings there are three specimens. 1st, A king seated on a chair, Plate XII, fig. 2, weighing 272 grains in my possession. 2nd, An animal running to left, Plate XV, fig. 5, weighing 60 grains, also in my possession. 3rd, Human-headed and winged bull walking to left, with an inscription of 4 letters, which will be discussed when I come to describe the coins. This seal is in the British Museum.

Bracelets and *Armlets* are by far the most numerous of the ornaments found on the Oxus. There are no less than six specimens in Plate XVI, and I have seen several others. They are all of gold from one-eighth to one-sixth of an inch in thickness, and invariably terminate in animal's heads, such as goats, rams, lions and griffins. See Plate XVI, figs. 5 to 10. The horned heads are very skilfully arranged for actual wear, the horns being always thrown on the back of the head, or joined together behind the head so as not to catch in the dress. Bracelets are mentioned by both Herodotus and Xenophon as parts of the usual ornaments of the Persians.

Torques, or Collars are represented by only two specimens. All the principal figures in the sculptures at Persepolis are represented wearing neck-chains or collars. They formed part of the royal ornaments deposited in the tomb of Cyrus,* and they formed part of the spoil which the Greeks stripped from the dead Persians after the battle of Platea.† The larger specimen, fig. 12, Plate XVI, is nearly one quarter of an inch in diameter. When complete it must have weighed about 7 ounces, as this fragment weighs 336 grains. It is of excellent workmanship.

The throne of the king would appear to have been a single high-backed chair. The only representation amongst the Oxus find is on the gold ring Plate XII, fig. 2. But other seats of a similar kind are found on the coins of the Satrap Datames or Tiridames. Plate XVII, fig. 5.

The Royal Chariot is well represented in Plate XII, both on the coins, and in an actual model chariot from the Oxus find. In this example there are two shafts or poles, each with a cross bar for two horses. The Royal chariot must therefore have had four horses as shown on the coins. The king is sitting in the chariot on a seat running fore and aft, and not across, while the charioteer is standing.

I have lately seen a small silver horse, which, from a hole on one side, would appear to have been attached to a chariot. It was solid, and came from the Oxus. It was a little larger than the horse in the Plate.

Animals.

The animals represented amongst the Oxus relics are the horse, the lion, the stag, a fish, a pigeon, a small bird like an eagle, and two snakes.

* Arrian, *Exped. Alexandri*, VI, 21.

† Herodot. IX, 80.

Also amongst the bracelets and collars there are heads of lions, dogs, goats, and bulls.

The principal figures are the stag, the sheep and the fish, the two former being represented in Plate XV, of full size, and the last only half size. The winged bull in the same Plate is also of full size. A first view recalls that of the Assyrian sculptures, both in subject and in style. The strongly displayed and exaggerated ribs and muscles of the bull, the stag, and the sheep suggest the possibility that they may even be real specimens of Assyrian art which had found their way to Bactria.

The most puzzling thing about these relics is their use. Many of them were certainly simple ornaments; such as the winged bull in Plate XV, which has eyelet holes for fastening it to some wooden or metal ground, such as the sheath of a sword. Professor Rawlinson supposes that the scabbard described by Curtius as *ex gemmâ erat vagina*, was formed "of a single piece of jasper, agate, lapis lazuli."* But as such a scabbard would have been fatal to the sharp edge of the sword, I have no doubt that the stones were only very thin slices fastened to a wooden sheath. In fact the scymitars found on the bodies of the dead Persians after the battle of Plataea are described by Herodotus as covered with "ornaments of gold."†

But as the stag, the sheep, and the fish of my collection could not possibly have been used for overlaying any flat surface, it has struck me that they may have been used as crests for helmets, or standards. The first two were certainly either nailed or possibly sewn with stout thread, to some larger object; but the fish must, I think, have been slung from the top of a standard as it has a stout ring or eyelet hole, on its left side, close to the end of the fin. It must therefore have been suspended perpendicularly with the mouth up.

Coins found on the Oxus.

In treating of the ancient coinage of Lydia and Persia it is necessary to remember that the former derived its monetary standard from Assyria and the latter from Babylonia. The value of the Lydian standard is placed beyond all doubt by the statement of Herodotus about the ingots of gold and electrum which Cræsus presented to the temple at Delphi.‡ According to his account the ingots were all of the same size, 6 palms long by 3 palms broad and 1 palm thick. Taking the Greek palm at 3·034375 inches, each ingot would have contained 502·898 cubic inches. Of these ingots 4 only were of pure gold weighing $2\frac{1}{2}$ talents, the remaining 118 being of pale gold, or electrum, and weighing only 2 talents each. Then taking the

* Ancient Monarchies, III, 208, 2nd edition.

† Herodotus, IX, 80.

‡ Herodot., Hist. I, 50.

specific gravity of water at 252·45 grains per cubic inch and that of pure gold at 19·258 times that of water, the weight of each of the 4 ingots of refined gold would have been 350·76 lbs., which makes the Lydian talent just 140·3 lbs. Now this was also the Assyrian talent, as we learn from the weights of the lions and ducks preserved in the British Museum, which give an Assyrian mina of 15,368 grains, and a Babylonian mina of 7,747 grains, or just one half of the other. The same difference is still preserved at the present day as the *man* of Shirâz and Bagdâd is just double that of Tabrez and Bushir, the average of the former being 14·06 lbs. and that of the latter being only 6·985.* The weight corresponding to the ancient talent is the *toman*, or *dah-man*, that is 10 *mans*, of which the Bagdâdi *toman* averages 140·6 lbs., and the Tabrezi *toman* 69·85 lbs., the former being the modern representative of the Assyrian, and the latter of the Babylonian talent.

But these values are only approximations, as it is very unlikely that the Lydian ingots were made in exact whole numbers of Greek measures, and we know that all measures of weight suffer degradation in the lapse of time. To obtain more exact values we must refer to the statements of ancient authors, and compare them with the weights of the actual coins which have come down to us.

The earliest fact bearing on this subject is the statement of Herodotus, in his account of the satrapies of Darius, that the value of gold in Persia was 13 times that of silver. But this is directly at variance with another statement that the Babylonian talent was equal to 70 Euboic minæ, because as the silver payments were made in the Babylonian standard and the gold payments in the Euboic, this would reduce the rate of silver to gold from 13 down to 11½. The true number of minæ in the Babylonian talent was 78, and not 70, as we may deduce from the difference of the rates between silver and gold which prevailed in Eubœa and Persia. Thus, as the rate of 10 is to 13, so are 60 minæ to 78 minæ. By applying this corrected value of the Babylonian talent to the text of Herodotus, all the discrepancies, which have hitherto puzzled commentators, disappear at once. He gives the total amount of the nineteen silver paying satrapies at 7,600 Babylonian talents, which his text says are equal to 9,540 Euboic talents, instead of 9,880 which is the true value at 13 rates. And that this was the actual rate that he used in the reduction is proved by his final total, which after adding the quota of the 20th satrapy, namely, 360 talents of gold, or $360 \times 13 = 4,680$ talents of silver, he makes 14,560 talents.† The sum of these

* — Kelly's Cambist—Prinsep's Useful Tables.

† Herodot., Hist., III, 96. I made this correction so long ago as 1858. The total of silver payments is said by Mr. Rawlinson (Herodotus, Vol. II, 486) to be 7,740 talents, but he has overlooked the fact that 140 talents of the 4th satrapy were not

two, 9,880 plus 4,680, is exactly 14,560 talents as stated by Herodotus.

As it is important to establish the correctness of the rate of 13 silver to 1 gold as noted by Herodotus, I append here the details of the sums actually paid into the Persian treasury.

Satrapies—Talents.

No.	I.—400
	II.—500
	III.—360
	IV.—360—(500 less 140 for cavalry not paid into Treasury.)
	V.—350
	VI.—700
	VII.—170
	VIII.—300
	IX.—1000
	X.—450
	XI.—200
	XII.—360
	XIII.—400
	XIV.—600
	XV.—250
	XVI.—300
	XVII.—100
	XVIII.—200
	XIX.—300

7,600 Babylonian talents of 78 Attic minæ
equal to 9,880 Euboic talents, of 60 Attic minæ

at 13 to 10—so $7,600 \times \frac{13}{10} = 9,880$ Euboic talents of silver
Add XXth satrapy 360 gold $\times 13 =$ silver 4,680

which gives a total of 14,560 Euboic talents of silver

exactly as stated by Herodotus.

The next fact regarding Persian money we get from Xenophon, who states that the talent was equal to 300 Darics, and the *siglos* was equal to $7\frac{1}{2}$ Attic oboli.* Taking the Attic drachma at 67·2 English grains and the obolus at 11·2 grains, the weight of the *siglos*, or Persian silver coin, would received by Darius. The actual total of silver payments was therefore only 7,600 talents, as I have stated above.

* Xenophon, *Anab.*—Ο δὲ Σίγλος δύναται ἐπὶ δὲ βολοὺς καὶ ἡμισβόλιον.

have been exactly 84 grains. But this value we know from numbers of existing coins to be too low, as the average of 10 good specimens, which I have recorded is 85.19 grains, of which 6 are of 86 grains and upwards, the heaviest reaching 87.9 grains. Accordingly I find that Hesychius fixes the value of the *siglos* at 8 Attic oboli, which would make it $11.2 \times 8 = 89.6$ grains in weight. His words are Σίγλος νόμισμα Περσικὸν δυνάμενον ὀκτὸς ὀβολοῦς Ἀττικῶν. The *siglos* is also mentioned in Attic inscriptions, according to Lenormant.* It seems probable therefore that the true value may have been between $7\frac{1}{2}$ and 8 oboli. Now several ancient writers state that the Persian Daric was equal to 20 Attic drachms; and as we gather from Xenophon that it was also equal to 20 Persian *sigli*, I conclude that this difference in value must have been due solely to the difference of rate of silver to gold in the two countries. In Greece, owing to the successful working of the gold mines in Thrace, the rate was only 10 to 1, while in Persia it was 13 to 1. That this value of 13 to 1 was not a fluctuating rate is proved by the fact that *Sīm*, the Persian word for silver, has also the meaning of "one thirteenth." I believe therefore that the weight of the *siglos* was to that of the Attic drachma exactly in the ratio of 13 to 10, which would make the *siglos* just 87.36 grains, or as nearly as possible intermediate between the two values given by Xenophon and Hesychius.

Accepting this as the true weight of the *siglos*, the value of 1 *Daric*, or 20 *sigli*, will be 1747.2 grains of silver, and the Persian talent, which was equal to 300 gold Darics in value, and to $300 \times 20 = 6000$ silver *sigli* in weight, will be 524,160 grains, or 74.88 lbs. At 81 grains to the *siglos*, the Persian talent would have been exactly 72 English pounds avoirdupois. Having thus established the normal weight of the *siglos* at 87.36 grains, I will now proceed to fix the weights of other Persian coins beginning with the *Daric*.

The *Daric* was the common coin of the ancient Persian empire, just as the sovereign or pound is the common coin of England at the present time. In value it was equal to 20 *sigli*; and as the rate of silver to gold was 13 to 1, the gold *Daric* must have been exactly one-thirteenth of the weight of 20 *sigli*, or $87.36 \times \frac{10}{13} = 134.4$ grains, which is the full weight of the Attic stater. I am aware that many numismatists consider the *Daric* to have been a lighter coin than the Attic stater. But I believe that this opinion has been created by simply ignoring the fact that the Darics were much longer in circulation than the Attic staters of Philip and Alexander, and by comparing Attic staters of full weight with the averages of a number of worn Darics. For instance Mr. Head makes the normal weight of the Darics only 130 grains.† But as he makes the normal

* *Revue Numismatique*, 1867, p. 362.

† *Coinage of Lydia and Persia*, pp. 29-30.

weight of the siglos to be 86·45 grains, the Daric should be $86 \cdot 5 \times \frac{4}{3} = 881$ grains exactly. He gets the lower weight by taking the rate of silver at 13·3 instead of 18 as distinctly stated by Herodotus, and as actually used by the historian in his reductions.

I have taken the normal weight of the *Daric* as 134·4 grains, or exactly equal to the Attic stater by raising it from the ascertained weight of the Persian *siglos* of silver. I will now compare the actual Darics that have come down to us with a number of Attic staters. For this purpose I have examined the catalogues and descriptions of nine different collections, from which I find that 21 staters of Philip, 42 of Alexander, 3 of Arrhidæus and 12 of Lysimachus, or altogether 78 Attic staters give an average weight of 132·11 grains. Taking the normal Attic stater at 134·4 grains, the average loss of these 78 staters is 2·29 grains. With these staters we may compare 125 Darics, which formed part of a hoard of 300 found in the canal of Xerxes. The average weight of these 125, as ascertained by H. P. Borrell, was 129·4 grains, while many of the heavier pieces reached 132 grains.* Now adding a loss of 2·29 grains to 129·4, we get 131·69 as the approximate normal weight of the Daric. But as many of the best pieces actually weighed 132 grains I think that the normal weight of the Daric may fairly be placed as high as 133 grains. It appears also from Hussey's examination of the gold staters in the British Museum and other collections that the average weight of 71 staters of Philip, Alexander and Lysimachus was a little over 132 grains, the heaviest only reaching 133 grains.† It must be remembered also that the Museum coins are selected specimens, chosen specially for the goodness of their preservation. I believe therefore that if a similar selection of the choicest specimens had been made from the 300 Darics found in the canal of Xerxes, their average weight would most probably have also reached 132 grains.

The Daric was divided into 20 silver shekels, or *sigli*, just as the English sovereign is divided into 20 shillings. The weight of the *siglos* itself has already been discussed. But the multiples and divisions of the *siglos* have hitherto received but little attention from numismatists with reference to their value. For the sake of mere convenience it seems almost certain that there must have been a quarter Daric piece either of gold or of silver. No gold coin of this value has yet been found, but there is a considerable number of large silver pieces weighing from 396 up to 438·5 grains which are certainly *quarter Darics* in value, whatever their name may have been. I have a record of the weights of 22 of these coins, of which the five heaviest average 426·66 grains, the maximum weight being 433·5 grains. Now

* H. P. Borrell in *Numismatic Chronicle*, VI, 153, and Max. Borrell in personal communication.

† Hussey's *Essay*, p. 16.

taking the *siglos* at 87·36 grains, the normal weight of the *pentasiglon* or quarter Daric, would have been 436·8 grains, or only a trifle more than the actual weight of these large silver coins. The types of these coins are the king in a chariot drawn by four horses, and a galley filled with rowers on the reverse. There is also a quarter piece of the same types, or one-sixteenth of a Daric.

The next silver coin in weight is the Aryandic of which Herodotus has given a brief account. These coins range from 220 to 236 grains in weight which is too heavy for the eighth of a Daric, or 218·4 grains at the rate of 13 to 1. It would, however, exactly agree with the required weight at 14 rates, as $134\frac{1}{4} \times \frac{1}{8} = 235\frac{1}{2}$ grains. But so far as I am aware there is no authority for supposing that gold was scarce or silver common in Egypt during the governorship of Aryandes.

The next coins in weight are those of the Satraps of Asia Minor, Tiri-bazus, Pharnabazus, Tiridames, and others. Mr. Head takes the normal weight of their coins at 172·9 grains, or just twice that of the *siglos*, which he fixes at 86·45 grains. According to my valuation of the *siglos* at 87·36 grains the full weight of the satrapal coins of Asia Minor would be 174·72 grains. The difference between these values is very little; but I altogether dissent from Mr. Head's identification of the *siglos* with the Persian *drachm*. This name I would assign to the *double siglos* of the Satraps on the following grounds. At the present day the three smaller weights of the Persian system are the *Dānik* or *Dāng*, the *Mishkāl*, and the *Darm* or *Diram*, which I would identify with the *Danaké*, the *siglos*, and the *Drachma* of ancient writers. As the *Darm* is equal to 2 *Mishkāls*, it corresponds exactly with the satrapal silver coins of Asia Minor, which are just double the weight of the *siglos*. The *Darm* was therefore one-tenth of a Daric.

The ancient Persian *siglos* was divided into 6 *Danakés*, just as the *Mishkāl* is now divided into 6 *Dāniks* or *Dāngs*; and as the *siglos* was $\frac{1}{16}$ th of the Daric, so the *Dānik* was $\frac{1}{24}$ th, and its multiple of 4 *Dāniks* [*Chahār-Dānik*] was $\frac{1}{6}$ th of a Daric. A specimen of this last very rare coin, weighing 55 grains, is given in Plate XVII fig. 4. The *Hemisiklon* is mentioned by Josephus, and the *Hemisiklion* by Hesychius. The *half-siglos*, or *quarter darm*, is such an obviously useful division that one would have expected the coin to have been very common. But so far as I am aware, not a single specimen of this value has yet been found of the royal archer type.

The *Dānik* itself is mentioned by three different authors, Pollux, Hesychius and Suidas. Pollux writes the name *Daniké* or *Danaké*, or *Dānikon*, and says that it was a Persian coin. Hesychius calls it *Danaë*, and says that it was worth more than an obolus.* But this form of *Danaë* is

* *Δανά νομισμάτιόν τι βαρβαρικὸν δυνάμενον πλέον ὀβολοῦ ἄλγῃ τι.*

certainly a mistake for *Danaké*, as he names the half coin *Hemidanakion*. Suidas also writes the name *Danaké*, and repeats what was previously said by Hesychius, that this coin was placed in the mouths of the dead. Comparing the statement of Hesychius, that the *Danaké* was worth more than an obolus, with the present division of the mishkâl or shekel into 6 *Dâniks*, it results that the normal weight of the *Danaké* must have been upwards of 14 grains, or more exactly $87\cdot36$ divided by $6 = 14\cdot56$ grains. Coins approaching this weight, that is from 12 to 13 grains, are not uncommon, but they are all of later date than the incuse Darics and sigli. According to Mr. Head these are *obols* of the Babylonian standard of 14 grains. The name of *Danaké* at once suggests the Indian silver *tangka*, which was of exactly the same weight, that is the fourth part of the 56 grains *karsha*.

Specimens of the *half-Dânik*, or *Hemi-danakion* of Hesychius are also known, but they are very rare. One of 6 grains with a city wall on one side, and the kneeling archer on the other is noticed by Mr. Head.

I can find no mention in ancient authors of the copper coinage of Persia; but a few specimens have come down to us, three of which are noted by Mr. Head. I possess a rather fine example of his Plate XIII, fig. 23, weighing only 24 grains. If the old Indian rate of 40 copper to 1 silver prevailed also in Persia, this coin would have been just one-twentieth of the *Danake*, or Persian obolus. The relative values of the ancient Persian coins just described will be best understood by arranging them in tabular form.

	<i>Gold</i>	<i>grains</i>	<i>Value in silver Sigli.</i>
1 Double Daric,.....		268·8	= 40 sigli or shekels.
1 Daric,		134·4	= 20 " "
<i>Silver.</i>			
1 Pentasiglon =		436·8	= 5 " "
1 Disiglon or Darm =		174·72	= 2 " "
1 Siglos or Shekel,.....		87·36	= 1 siglos.
1 Chahâr Dânik,.....		58·24	= $\frac{2}{3}$ siglos—the Indian karsha.
1 Double Danik,.....		29·12	= $\frac{1}{3}$ siglos—the Indian kona.
1 Dânik or Danake, ...		14·56	= $\frac{1}{6}$ siglos—the Indian tangka.
$\frac{1}{2}$ Dânik, Hemidanakion,		7·28	= $\frac{1}{12}$ siglos.

In Sanskrit Dictionaries I find mention of a coin named *Ropaka*, which is said to be of the value of one-seventieth of the Indian *Suvarṇa*. As this would be an extremely inconvenient sub-division, I think it almost certain that the coin was one-sixtieth of the Persian Daric and Attic stater of Bactria, which was just equal to six-sevenths of the Indian *Suvarṇa*. A coin of this value certainly existed in India, but it was a half *karsha* in value, and was usually called *kona*.

DESCRIPTION OF THE COINS.

PERSIAN KINGS.

No. 1. GOLD. *Double Daric*, 0·8 inch. Pl. XVII, fig. 1. Author. 255 grains. •

• *Obv.* King to right with radiated tiara and long beard kneeling on right knee, holding bow in left hand and arrow in right hand. Quiver arrows at back.

Rev. Rude shapeless incuse.

No. 2. GOLD. *Daric*, 0·7 inch. Author. 132·5 grains.

Obv. King as on No. 1, Mr. Head, Pl. I, 16.

No. 3. GOLD. *Double Daric*, 0·75 inch. Author. 256 grains.

Obv. King as on No. 1; but with lofty head-dress and holding a javelin in right hand.

No. 4. GOLD. *Double Daric*, 0·75 inch. Author. 256 grains.

Obv. King as on No. 3; but with radiated tiara. In the field to left a wreath, and some indistinct object above.

No. 5. GOLD. *Double Daric*, 0·75 inch. Author. 255 grains.

Obv. King as on No. 4. In the field to left the Greek letters Φ and Λ.

Rev. Two ovals with rough marks inside incuse.

No. 6. GOLD. *Double Daric*, 0·75 inch. Author. 255 grains.

Obv. King as on No. 4, but with short beard, and long points to his crown. In the field to left the Greek letter φ, and a Greek monogram forming ΜΗΤ.

Rev. A crescent on each side with three marks inside, the whole in a symmetrical incuse, Mr. Head, Pl. I, 15.

No. 7. GOLD. *Daric*, 0·65 inch. Author. 129·5 grains.

Obv. King as on No. 4.

No. 8. SILVER. *Pentasiqlon* or *Quarter Daric*, 1·3 inch. Author. 407½ grains.

Obv. King in four-horse chariot, with driver in front, and an attendant on foot behind the chariot. Plate XII, fig. 6.

Rev. Boat with rowers and sails, on zigzag waves, surrounded by a circle.

No. 9. SILVER. *Pentasiqlon* or *Quarter Daric*, 1·1 inch. Author. 400 grains. Plate XII, fig. 7. British Museum specimens.

Obv. King in four-horse chariot as on No. 8.

Rev. Boat with rowers on zigzag waves.

No. 10. SILVER. *Aryandic* or *two and half sigli*, 0·95 inch. Author. 219 grains. Plate XVII, fig. 2. See Mr. Head, Plate I, 20.

Obv. King bearded with radiated crown, kneeling on right knee, holding a bow in left hand, and a javelin in right hand.

Rev. Large incuse with uncertain objects.

No. 11. SILVER. *Aryandic*, 0·9 inch. Author. 226·5 grains. Plate XII, fig. 5.

Obv. King as on No. 10. In the field to left the Greek letters ΔΗ.

Rev. Large incuse as on the last. •

No. 12. SILVER. *Daric*, 0·6 inch. Author. 82 grains. Mr. Head, Plate I, fig. 25.

Obv. King as on No. 1, with arrow in right hand.

No. 13. SILVER. *Daric*, 0·6 inch. Author. 83 grains. Mr. Head, Pl. I, 25.

Obv. King as on No. 10. •

No. 14. SILVER. *Four Dānik piece or two thirds of a siglos*, 0·55 inch. Author. 55·5 grains. Plate XII, fig. 4.

Obv. As on No. 10.

No. 15. SILVER. *Daric*, 0·6 inch. Author. 83 grains. Mr. Head Pl. I, 28.

Obv. King kneeling on right knee, and shooting an arrow.

PERSIAN SATRAPS.

Tiribazus, B. C. 400—380.

No. 16. SILVER. *Double Siglos*, 0·9 inch. Author. 154 grains. Plate XVII, fig. 3. Duc du Luynes, Pl. I, 1, 2, 3.

Obv. Jupiter or Bâl, standing to left, holding spear in left hand and bird on right. Legend in Phœnician characters to right *Tiribazu*.

Rev. Ormazd; a human body above the solar disc. In his left hand a flower, in the right a wreath.

Pharnabazus, B. C. 400—380.

No. 17. No coin of this Satrap has come into my possession, but I have received a bad impression of a single specimen of the same type as the coin of Tiridames, Plate XVII, fig. 4.

Tiridames.

No. 18. SILVER. *Double Siglos*, 0·85 inch. Author. 150 grains. Plate XVII, fig. 4. Duc de Luynes, Pl. II, 9, 10.

Obv. Helmeted and bearded head of Satrap to right. Legend to right in Phœnician characters *Tiridamu*. The Duc de Luynes reads the name as *Dernes*, and M. Waddington as *Datames*. I have adopted the reading of M. Lenormant.

Rev. Female head to the front.

No. 19. SILVER. *Double Siglos*, 0·9 inch. Author. 160 grains. Plate XVII, fig. 5. Duc de Luynes, Pl. II, 5, 6, 7.

Obv. Jupiter seated to right. Legend in Phœnician characters to left *Bâl Tars*, "the god Bâl of Tarsus."

Rev. Satrap seated to right, clad in the *Kandys* or Persian tunic, the *Anaxyrides*, or* Persian trowsers, and the Persian felt tiara with lappets tied under the chin. Legend to the left in Phœnician characters *Tiridamu*.

Pharaspes, or Pharnaspes.

Of this Satrap 3 gold coins and 1 gold ring are now known, of which all but one of the coins came from the Oxus. Of the Oxus relics I received impressions, from which the photograph of the ring, Plate XVII, fig. 6, was taken. Figs. 7 and 8 are taken from the photographs of the coins in the British Museum. Of the third coin which is similar in type to fig. 9, I have only an impression, the original having gone, I believe, to the British Museum. The two coins figs. 7 and 8 have been published by Mr. Percy Gardner in the Numismatic Chronicle.

No. 20. GOLD-RING. The only notice that I have seen of this ring is the following—"Society of Antiquaries: M. Franke exhibited a gold ring engraved with a man-headed winged bull, wearing a Persian tiara, and a caduceus without a handle, which is the zodiacal sign for Taurus. From a Pehlavi inscription on the seal Mr. Percy Gardner identified it as belonging to the Persian king *Vahaspes*, who reigned about 70 years after the death of Alexander the Great." I think that the second letter may be *r*, and accordingly I read the name as *Pharaspas*, or *Pharnaspes*. Arrian mentions a Mede named *Baryaxes* who had put the royal tiara on his head and called himself king of Media and of Persia. He was brought by Atropates to Alexander at Pasargadae, where he was put to death. I think it not impossible that these coins may belong to him, or perhaps he may be identified with Pharasmanes, king of Chorasmia [Arrian, Anab. IV. 15], who was also a contemporary of Alexander.

No. 21. GOLD. *Stater*. British Museum, 0·75 inch, weight 135·9 grains, from the Oxus. Plate XVII, fig. 7. See Numismatic Chronicle XIX, Plate I, fig. 2.

Obv. Head of Satrap to right, bearded and clad in soft felt tiara with long lappets tied under the chin. Legend to left in ancient Pehlavi characters.

Rev. Satrap in four horse chariot to right. Legend below in ancient Pehlavi characters.

No. 22. GOLD. *Stater*, British Museum, 0·8 inch, weight 132·9 grains, from Payne Knight's collection. Plate XVII, fig. 8. See Numismatic Chronicle XIX, Pl. 1, fig. 3.

Obv. Helmeted head of Pallas to right, III under chin.

Rev. Victory to front, with palm over left shoulder and wreath in

right hand. To right, legend in ancient Pehlavi characters, and one letter to left.

As this piece is an undoubted copy of Alexander the Great's gold coins, it is possible that the letters III or 73, may stand for the date, which would be 312—73 = 239 B. C.

No. 23. GOLD. *Double stater*, only a paper impression seen. The coin is similar to fig. 9, Plate XVII, but with the ancient Pehlavi legend of the above seal and coins.

No. 24. GOLD. *Double stater*, 0·85 inch, weight 256 grains. Author. Plate XVII, fig. 9.

Obv. Youthful head of Alexander the Great, covered with the skin and tusks of an elephant's head.

Rev. Victory winged, with palm branch and wreath to left. In the field to left, head of Bukephalos, and below the Greek letters ΔΙ.

As these are the well known types of Alexander the Great's gold money, this piece was most probably issued from one of the Eastern mints some time during his reign.

Alexander the Great.

No. 25. Of Alexander the Great about one hundred tetradrachms and as many drachms were comprised in the Oxus find, the greater number of them in very poor condition. I have kept one of the tetradrachms which is in very good preservation on the reverse. It is of the usual type of the seated Zeus, with the name only in small neat characters. In the field to left is a three quarter horse feeding. Beneath the chair is a monogram formed of the letters ΠΑΑΗ and under the eagle a second monogram No. 1351 of Müller, which with the horse is found on the coins of the Larissa mint.

Andragoras.

Contemporary with Alexander are the coins of Andragoras in gold and silver, which bear the name only without the title of king. Admitting the correctness of the conclusion, the coins must belong to the person mentioned by Justin as Andragoras, a Persian nobleman, who was made governor of Parthia by Alexander, to whom the kings of the Parthians afterwards traced their origin.* A second Andragoras, also a governor of the Parthians, is afterwards mentioned by Justin, as having been slain by Arsakes, the founder of the Parthian monarchy, in B. C. 248. If the title of ΒΑΣΙΛΕΥΣ had been upon these coins, I should have assigned them to him at once, as one of the governors who followed the example of Diodotus and revolted against Antiochus II. of Syria. But the absence

* Justin, XII. 5. Parthis deinde domitis, praefectus his statuitur ex nobilibus Persarum Andragoras; unde postea originem Parthorum reges habuere.

of the title of King is, I believe, conclusive that the date cannot be later than the time of Alexander the Great, as all his generals assumed the title and placed it on their coins.

No. 26. GOLD. *Stater*, 0.75 inch; weighing 132 grains. Author. Duplicate, British Museum. Triplicate, Author. There are numerous forgeries of which I have seen seven specimens.

Obv. Bare and bearded head of Jupiter to right, the hair very formally arranged. Behind the head a monogram forming the letters ATPOHATIL. See Numismatic Chronicle, Vol. XIX, p. I, and Plate I, No. 1.

Rev. The king helmeted being driven by Victory in a four-horse chariot. Three dots in the field below the fore-feet of the horses. In the exergue (ΑΝΔ) ΠΑΤΟΡΟΥ. The British Museum coin has the name complete at the beginning, but deficient at the end.

No. 27. SILVER. *Tetradrachma*, 0.95 inches, weight 253 grains. Author. A duplicate in better preservation and larger has gone to the British Museum, 1.1 inch, weight 255.8 grains, see Numismatic Chronicle, Vol. I, 3rd Series, Pl. II, fig. 1.

Obv. Turreted female head to right. Monogram behind the head, the same as on the gold coins.

Rev. Pallas armed with helmet, spear and shield to left, holding a bird in her right hand. Legend to right ΑΝΔΠΑΤΟΡΟΥ.

The silver coins appear to me to be of much finer execution than the gold coins.

COINS OF CITIES.

Akanthus in Macedonia.

No. 28. SILVER. *Tetradrachma*, 1.1 inch; weight 253.5 grains. Author. Duplicate 1.0 inch, weight 250.5 grains. Author.

Obv. Lion devouring a bull, surrounded by a circle of dots. Over the Lion the Greek letter Θ.

Rev. Four incuse squares.

The duplicate has the same Greek letter over the bull.

● *Aspendus in Pamphylia.*

No. 29. SILVER. *Disiglon*, 0.9 inch. I have seen six specimens and have received impressions of others.

Obv. A slinger preparing his sling. In the field to right a *triquetra* of three human legs; and to the left the legend ΕΣΤΕΔΙΙΥΣ *Estwediius*.

Athens.

No. 30. SILVER. *Tetradrachma*, 0·95 inch. Weight 220 grains.

Author. Very much worn.

Obv. Archaic helmeted head of Pallas to right with full elongated eye.

Rev. Owl standing to right in indented square. To left, olive branch and crescent. To right AΘE.

No. 31. SILVER. *Tetradrachma*, 0·9 inch. Weight 266 grains.

Author. Duplicate, native dealer.

Obv. Archaic head of Pallas, but with side eye.

Rev. Owl, olive twig, and crescent, with AΘE as before; but between the owl and inscription the letter Δ surmounted with a sloping line, perhaps intended for ΔΙ or ΙΔ.

No. 32. SILVER. *Tetradrachma*, 0·9 inch. Weight 260 grains.

Author. Plate XVIII, fig 1. See Numismatic Chronicle, XIX, Plate 1, fig. 7.

Obv. Helmeted head of Pallas to right, of later workmanship, with earrings, and roll of hair under back of helmet. In field to left a Greek monogram forming MOTY or TIMΩ.

Rev. A well formed owl to right, with olive twig and crescent, and the usual legend AΘE.

No. 33. SILVER. *Didrachma*, 0·7 inch. Weight 121 grains.

Author. Exactly similar to the last. The British Museum coin, Numismatic Chronicle, XIX, Pl. I, fig. 7, appears to be a much worn duplicate of this didrachma.

Uncertain.

No. 34. *Tetradrachma*, 0·85 inch. Weight 250 grains. Author. Duplicate. British Museum, 260·2 grains.

Obv. Helmeted head of Pallas to right, as on the coins of Athens.

Rev. Owl standing with legs together. To left, olive twig and crescent. To right, the Greek letters ΑΙΓ. See Numismatic Chronicle, XX, Pl. X, fig. 5.

In his notice of this coin Mr. Percy Gardner states his opinion that this, like the others just described, is an "imitation of Athenian coins current in the far East about the time of Alexander." The letters ΑΙΓ he takes "to begin the name of a Satrap, not of a city, for cities did not in those regions place their names on their coin." I confess myself that I should rather prefer the name of some city, connected with Athens. In my copy of Combe's Description of the Hunter Collection which had previously belonged to H. P. Borrell, I remember seeing a new attribution by Borrell of a coin of this type to Aegium in the Troad. I write from

memory, as I have no books to refer to, all my Numismatic Books having been burnt in the Pantechnicon.

No. 35. SILVER. *Drachma*, 0·5 inch. Weight 54 grains. Author.

Obv. Helmeted head of Pallas, as on Nos. 32 and 33.

• *Rev.* An eagle to left with head turned backward. Over the tail of the bird a double sprig.

Byzantium.

No. 36. SILVER. *Drachma* (?), 0·65 inch. Weight 74 grains. Author. I have seen a second coin.

Obv. Bull walking to left. Below a fish, and above the letters IIY.

Rev. Incuse cross, like the sails of a windmill.

Kelenderis.

No. 37. I have seen the impression of a single coin of the common type.

Tarsus.

The coins of Tarsus that I have seen number about 25; but at least an equal number of impressions has been sent to me of which I have taken no account. They comprise several varieties, and probably range from B. C. 400 to 250. I have given only one of the coins in the accompanying Plates, as they can be referred to in other works, more especially in the valuable work of the Duc de Luynes.

No. 38. SILVER. *Disiglon*, 0·95 inch. Weight 163·5 grains. Author. See De Luynes, *Satrapies*, Pl. IV, *Gaos*.

Obv. Jupiter of Tarsus sitting with spear in left hand and eagle at right hand. Legend in Phœnician characters to right *Bâl-Tars*.

Rev. Lion devouring a bull. Legend in Phœnician letters in two lines, as read by De Luynes, *Gahosh Mazarka*. The satrap Gaos ruled from B. C. 386 to 384. I have not placed his coins with those of the satraps, as I believe that the reading of his name is doubtful.

No. 39. SILVER. *Disiglon*, 0·85 inch. Weight 150 grains. Author. Also a duplicate. 158 grains.

Obv. Jupiter of Tarsus as on the last, but with a bunch of grapes in his right hand. Phœnician legend, *Bâl-Tars*.

Rev. Lion devouring a stag. Phœnician legend over the lion *Mazarka*. In the field O.

No. 40. SILVER. *Disiglon*, 0·78 inch. Weight 162·5 grains. Author. See De Luynes, *Satrapies*, Pl. IX, 13.

Obv. Jupiter of Tarsus seated. Phœnician legend *Bâl-Tars*.

Rev. Lion walking to left, tail undulated behind. Phœnician legend *Mazarka.*

No. 41. SILVER. *Tetradrachma*, 0·9 inch. Weight 250 grains.

Author. See De Luynes, *Satrapies*, Pl. IX, 18.

Obv. Jupiter seated, no legend.

Rev. Lion walking to left with tail between legs, over his back the Greek letter Γ .

No. 42. SILVER. *Tetradrachma*, 0·95 inch. Weight 259 grains.

Author. See De Luynes, *Satrapies*, Pl. X, 26.

Obv. Jupiter of Tarsus seated: no legend.

Rev. Lion walking to left with tail between his legs. Over his back the anchor of Seleukus I. with the Greek letter Π . Below a crescent with a Greek monogram forming $\Sigma\text{AMO}\Sigma\text{AT}$. See Mon. 9 of Syrian coins in my List in *Numismatic Chronicle*.

No. 43. SILVER. *Tetradrachma*, 0·95 inch. Weight 256 grains.

Author. Plate XVII, fig. 10.

Obv. Jupiter of Tarsus seated to left. In front the head of Bukephalos.

Rev. Lion as on No. 42 with anchor of Seleukus I. above. Below the Greek letters ΔI .

No. 44. SILVER. *Hemidrachma*, 0·5 inch. Weight 31 grains.

Author.

Types of both sides the same as the last, including the head of Bukephalos and the letters ΔI .

COINS OF KINGS.

Pixodarus, King of Caria.

No. 45. GOLD. *Quarter stater*, 0·4 inch. Weight 29 grains.

Mr. Gibbs.

Obv. Female head.

Rev. Zeus of Labranda carrying the double-headed axe. Legend to right $\Pi\text{I}\Sigma\text{O}\Delta\alpha\rho\upsilon$.

Lysimachus, King of Thrace.

No. 46. SILVER. *Tetradrachma*, of the usual size and in good condition. Native dealer.

This is one of the common coins of Lysimachus, which has remained in the native owner's hand as he wanted 100 £ for it!

Seleukus I. Nikator.

No. 47. SILVER. *Tetradrachma*. See British Museum Catalogue of Greek coins, Seleucid kings of Syria, Pl. I, figs. 3 and 4.

Obv. Head of Alexander as Herakles clad in lion's skin.

Rev. Zeus seated with spear in left hand and eagle in right hand—
ΒΑΣΙΛΕΩΣ ΣΕΑΕΥΚΟΥ.

I have seen three specimens of this coin, and impressions of several others.

• No. 48. *SILVER. Tetradrachma*, 0·95 inch. Weight 260 grains.
Author. Two fine specimens. Three others seen.

Obv. Laurelled head of Zeus to right, in fine preservation.

Rev. Pallas with thunderbolt in hand, driving a chariot drawn by four horned elephants. Anchor above. Belows ΣΕΑΕΥΚΟΥ ΒΑΣΙΛΕΩΣ. Greek monogram over the elephants forming ΣΕΑΕΥΚΕΙΑΣ.

No. 49. *SILVER. Tetradrachma*, 1·00 inch. Weight 259 grains.
Author.

Obv. Laurelled head of Zeus to right; very bold relief and very fine preservation. Monogram behind forming AP.

Rev. Type same as the last.

Nos. 50, 51. *Drachmas*, same types and with the same legend, but monogram same as No. 32, British Museum Catalogue. Weights 63·5 and 63 grains, and both 0·60 inch in size.

No. 52. *Hemidrachma*, 0·50 inch. Weight 26 grains. *Author.* Same types, but with only 2 elephants to the chariot. Legend ΒΑΣΙΛΕΥΟΝΤΟΣ only. Above is the letter Δ in a circle over the elephants.

This is the only coin that I have seen with this title amongst some 30 specimens of the small money.

Seleukus and Antiochus.

Nos. 53, 54. *SILVER. Tetradrachmas* of Phœnician standard, 1·00 and 0·90 inch, weighing 215 and 206 grains. *Author.* Mr. Gardner suspects a similar coin in the British Museum, weighing 212·6 grains, to be plated: but my 2 coins are good silver. See Plate XVIII, fig. 2.

Obv. Laurelled head of Zeus to right. On No. 54 the letter E below.

Rev. Pallas with thunderbolt in chariot drawn by four horned elephants. Legend in 3 lines ΒΑΣΙΛΕΩΣ ΣΕΑΕΥΚΟΥ ΑΝΤΙΟΧΟΥ. Monogram above elephants forming ΔΩ in a circle.

On the peculiar legend of these coins Mr. Gardner has the following note*: "The meaning which one would naturally attach to it is that the coin was issued, while Seleukus was king, by his son Antiochus, who was viceroy of the Eastern provinces of the empire. The type belonging to Seleukus rather than to his son would tend to support this view." That this is the true meaning of the legend is decisively proved by the smaller coins of this type which follow:

Nos. 55, 56, 57, 58. *SILVER. Drachmas*, 0·60 and 0·65 inch.

* Numismatic Chronicle, XIX, 10.

Weights 50·5, 48·0, 43·0, 50·0 grains. Author. Plate XVIII, figs. 5, 6.

Obv. Laurellled head of Zeus to right.

Rev. Pallas with thunderbolt in chariot drawn by 2 elephants.

Inscription in three lines ΒΑΣΙΛΕΩΝ ΣΕΛΕΥΚΟΥ ΚΑΙ ΑΝΤΙΟΧΟΥ.
Above the elephants the letter Δ in a circle.

This curious legend shows most conclusively that the coins belong to the two "Kings Seleukus and Antiochus." Now we know from Plutarch* and Appian that when Seleukus gave up Stratonike to his son, he at the same time granted him the title of king and made over to him the whole of the Eastern half of his kingdom from the Euphrates to the Indus. As his marriage with Stratonike took place either in B. C. 294 or 293, I think that Antiochus may have issued these coins about the same time to commemorate his acquisition of the royal title.

Nos. 59, 60. SILVER. *Oboli*, 0·35 and 0·30 inch. Weight 8·5 and 8·0 grains. Types as on the preceding coins, including monogram Δ in circle, but without any inscription Plate XVIII, figs. 3, 4.

Antiochus I.

Nos. 61, 62. GOLD. *Stater*, 0·75 and 0·72 inch. Weight of each 130 grains. Author. I have seen several others.

Obv. Diademed head of king to right. No. 61 of middle age, No. 62 of old age.

Rev. Apollo seated on the Cortina, resting left hand on bow and holding arrow in right hand. In the field Δ. Inscription in two lines ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ.

No. 63. GOLD. *Stater*, 0·70 inch. Weight 129·5 grains. Author.

Obv. Diademed head of king to right, old portrait.

Rev. Apollo as on No. 61, star above, and lyre in field below, with monogram forming ΔΙ or ΔΙΤ. Inscription as before.

Nos. 64, 65. SILVER. *Tetradrachma* and *drachma* of same type as the gold coins just described.

No. 66. SILVER. *Drachma*, 0·65 inch. Weight 61 grains. Author. Plate XVIII, fig. 13. See gold coin of Seleukus of same type in British Museum Catalogue of Seleucid kings, Plate I, fig. 6.

Obv. Diademed head of Antiochus to right with bull's horn above ear.

Rev. Horned horse's head (Bukephalus?) to right, monogram to right forming ΑΠΑ. Monogram below indistinct. Inscription ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ.

No. 67. GOLD. *Stater*, 0·6 inch. Weight 131·5 grains. Author. Plate XVIII, fig. 8. Duplicates, Mr. A. Grant and Author.

* Plutarch, in vita Demetrii.

Obv. Diademed head of king to right in bold relief. Duplicate very flat relief.

Rev. Head of Bukephalus to right, horned and bridled, with twisted forelock between the horns. In field ΔI. Inscription as on No. 66.

• Nos. 68, 69, 70. SILVER. *Tetradrachmas*, 1·05 inch. Weights 258, 259, 261 grains. Author. See Plate XVIII, fig. 9.

Obv. Diademed head of the king to right. The head on the heaviest coin is younger, and of much finer execution than the others.

Rev. Horned and bridled head of Bukephalus, with three tufts of hair between the ears. In the field to right the letter Δ in a circle. Inscription as before.

Nos. 71, 72. SILVER. *Tetradrachmas*, 1·0 and 0·93 inch. Weights 256 and 260 grains. Author.

• Types as on the last, but the head of Bukephalus much larger, and with only one tuft of hair between the ears. Monogram and inscription as before.

No. 73. SILVER. *Tetradrachma*, 1·00 inch. Weight 254 grains. Author. Duplicate, Mr. A. Grant. See Plate XVIII, fig. 10.

Types the same as on the last, but with the addition of the letters ABIA above the name of Antiochus. See Numismatic Chronicle, XX, Plate X, fig. 4, for Mr. Grant's coin.

Mr. Percy Gardner has suggested that ABIA may probably be "the beginning of the name of some Satrap, or semi-independent ruler of a district in Bactria, or the Paropamisus." The horned horse's head, he notes, is "a type belonging specially to those regions."

Nos 74, 75, 76. SILVER. *Drachmas*, 0·65 inch. Weight 65 grains. Author. Duplicates 64·5 and 63 grains.

Types exactly the same as the *Tetradrachmas*, Nos. 68 to 70.

Nos. 77, 78. SILVER. *Hemidrachmas*, 0·53 inch. Weight 31·5 grains. Author. Plate XVIII, fig. 12.

Types the same as the *Tetradrachmas*, Nos. 68 to 70.

No. 79. SILVER. *Drachma*, 0·65 inch. Weight 64 grains. Author. A remarkably fine coin, Plate XVIII, fig. 11.

Obv. Youthful head of king to right in bold relief.

Rev. Head of Bukephalus horned and bridled, with one tuft between horns. Inscription as on No. 66. No monogram.

No. 80. SILVER. *Tetradrachma*, 1·10 inch. Weight 253 grains. Author. Duplicate, 1·00 inch, 252 grains. Plate XVIII, figs. 14, 15.

Obv. Middle-aged head of king to right.

• *Rev.* Apollo seated on Cortina with 2 arrows in right hand. Inscription as on No. 66. In the field to left the letter Δ in a circle.

Antiochus II.

No. 81. GOLD. *Stater*, 0·8 inch. Weight 129 grains. Author. Duplicate, Mr. A. Grant.

Obv. Diademed head of the king to the right.

Rev. Zeus naked, with aegis on his left arm, and thunderbolt in his upraised right hand, moving to left; his feet wide apart. In the field eagle and wreath. Inscription as on No. 66.

No. 82. GOLD. *Stater*, 0·75 inch. Weight 127 grains. Author.

Obv. Diademed head of king to right, somewhat smaller than on the last.

Rev. Zeus as on No. 81, but legs not so wide apart. In the field eagle with the letter N. Inscription as on No. 81.

No. 83. SILVER. *Tetradrachma*, 1·00 inch. Weight 257 grains. Author. Several Duplicates.

Obv. Diademed head of king to right.

Rev. Zeus combatting as on the gold coins. Eagle and monogram No. 29 of my list of Syrian monograms in Numismatic Chronicle. Inscription as on No. 81.

No. 84. SILVER. *Tetradrachma*, 1·05 inch. Weight 254 grains. Author.

Obv. Diademed head of king to right.

Rev. Zeus combatting as before. In the field an eagle with the letter N. Inscription as on No. 81.

No. 85. SILVER. *Drachma*, 0·7 inch. Weight 60 grains. Author. Both types as on No. 81.

No. 86. SILVER. *Drachma*, 0·7 inch. Weight 61 grains. Author. Both types as on No. 81, but instead of the wreath, a monogram forming the letters YΔ. Inscription as on No. 81.

Antiochus III.

No. 87. GOLD. *Stater*, 0·75. Weight 130 grains. Author. Duplicate, 130 grains.

Obv. Youthful diademed head of king.

Rev. Apollo seated on Cortina. Star above, and lyre in field below, monogram forming ΔT or ΔIT. Inscription as on No. 66.

No. 88. GOLD. *Stater*, 0·72 inch. Weight 131 grains. Author.

Obv. Youthful laureated head of king to right.

Rev. Apollo seated on Cortina. In field to left Δ only. Inscription as before.

I am aware that these gold coins with the youthful face have been attributed to Antiochus Hierax by Mr. Percy Gardner. But I find it difficult to believe that any coins of Hierax, whose rule was confined to

Asia Minor, could have found their way to Bactria. I think also that the well known tetradrachmas with the hawk's wing over the ear belong to Hierax; and that he received his nickname of *Hierax*, or the "Hawk," from the wing on the coins, just as Alexander the Great received his title of *Dhulkarnain* or "Lord of Horns" from his portrait on the coins with the horn of Ammon. For these reasons I am inclined to assign the gold coins with the youthful portrait to Antiochus III. The occurrence of the monogram Δ on these coins is strongly in favour of this attribution, as it is found on so many others of the Oxus hoard, which are admittedly the mintage of the Eastern provinces, where the power of Hierax was unknown. On the other hand the coins with the hawk's wing seem to me to be from some of the well-known mints of Asia Minor where Hierax actually ruled. Thus the feeding horse, which occurs on all the hawk wing coins, is assigned by Müller to Alexandria in the Troad, while one of the British Museum coins with a double monogram is referred by Mr. Gardner himself to Alexandria in the Troad.* The other two British Museum coins I would refer to Metropolis or the Kayster. The first coin I should prefer giving to Magnesia on the Hermus. A fourth coin published by Leake was probably minted at Apameia on the Kibôtus.

Diodotus.

No. 89. GOLD. *Stater*, 0.75 inch. Weight 131.5 grains. Author. Several duplicates.

Obv. Diademed head of king to right, very like the portrait on the coins of Antiochus II. of the same types. I agree with Mr. Gardner in thinking that both are the portraits of Diodotus.

Rev. Zeus combatting. To left eagle and wreath as on the coins of Antiochus II. Inscription ΒΑΣΙΛΕΩΣ ΔΙΟΔΟΤΟΥ.

No. 90. GOLD. *Stater*, 0.70 inch. Weight 127 grains. Author.

Obv. Diademed head of king to right, different from the last.

Rev. Zeus combatting. To left eagle and wreath as before, but with a spear-head in the field to right. Inscription as on No. 89.

No. 91. GOLD. *Stater*, 0.72 inch. Weight 128 grains. Author.

Obv. Diademed head of king to right, different face.

Rev. Zeus combatting. In the field to left an eagle and the letter N. Inscription as on No. 89.

No. 92. GOLD. *Stater*, 0.73 inch. Weight 129 grains. Author.

Obv. Diademed head of king to right, like No. 89.

Rev. Zeus combatting. In field eagle and wreath with star above them. Inscription as on No. 89.

No. 93. SILVER. *Tetradrachma*, 1.00 inch. Weight 259 grains. Author. Duplicate 259 grains.

* Selucid kings of Syria, Antiochus II, No. 5 coin.

Obv. Diademed head of king to right. *

Rev. Zeus combatting as on the gold coins, eagle at foot. Inscription as on No. 89.

No. 94. SILVER *Drachma*, 0·65 inch. Weight 53 grains. Author. Both types as on No. 92.

No. 95. SILVER *Tetradrachma*, 1·10 inch. Weight 259 grains. Author. Duplicate 249 grains.

Both types as on No. 92, but with the addition of wreath over the eagle.

No. 96. SILVER. *Drachma*, 0·7 inch. Weight 61 grains. Author. Similar to No. 94. A duplicate, 62 grains, has a monogram forming ΠΥΡΗ with the letter Γ below.

No. 97. SILVER. *Drachma*, 0·68 inch. Weight 61 grains. Author.

Obv. Diademed head of king to right.

Rev. Zeus combatting. In field eagle and crescent. Inscription as before.

Euthydemus.

No. 98. GOLD. *Stater*, 0·70 inch. Weight 126 grains. Author. Duplicate 127 grains.

Obv. Diademed head of king to right.

Rev. Herakles seated on a rock with left hand placed on the rock, and right holding a club, which rests on a pile of three rocks in front. Elbow well raised above knee, and club pointed upwards clear of head. Monogram over top of club forming ΝΙΚ.

No. 99. GOLD. *Stater*, 0·65 inch. Weight 127 grains. Author. Duplicate 133 grains.

Obv. Diademed head of king to right

Rev. Herakles as on the last, but rather smaller. Elbow almost touching thigh, and club resting on a pile of four rocks, with top pointed towards forehead.

Nos. 100, 101. SILVER. Coins of Euthydemus of all the well known types. Several in good preservation; but many in very poor condition.

Here ends the list of all different varieties of coins that have come under my notice. Some of them are unique, and several are very rare, while many others are very common. The coins that I have seen amount to 64 gold and 459 silver, or altogether 523 specimens. But at least as many more must have been sold to Officers with the Army in Afghanistan, so that the whole number found cannot have been less than 150 gold and 1000 or 1200 silver coins, mostly tetradrachms. The value of the coins alone would therefore have been about one talent or upwards, or 300£ sterling.

It is impossible to estimate the value of the ornaments and other relics found in the Oxus deposit, as so many of them were cut up on the spot, whilst many have found their way into other hands. It may be useful, however, to note that my own collection comprises 9,788 grains of gold relics and 34,075 grains of silver relics. The Chariot and Horseman belonging to Lord Lytton weigh 1,431 grains of gold. The par value of the relics that I have seen may be summed up as follows:

	GOLD.	SILVER.	
Author,	1,223 Rs.....	190 Rs.	.
Lord Lytton,	180 Rs.		
Major Burton,	700 Rs.		
	2,103 Rs. +	190 Rs.	
Total,	2,293 Rs.		

If all the bracelets and collars now in my possession were complete, the actual value of the gold and silver would then exceed 2,500 Rs. But I have heard of a group of chariot and horses of 120£ intrinsic value which has lately been sold in England, and of a large silver horse and other relics, which would certainly raise the actual value of the ornaments and other relics to 5000 Rs. So that the whole treasure in relics and coins would have been worth 750£ at par.

Large finds of coins are not unknown in India. The following may be of interest to others besides coin collectors.

In 1842, near Coimbatore, 524 Roman gold coins were found, comprising 134 Augustus, 381 Tiberius, 3 Caligula, 5 Claudius. [Bombay Asiatic Society's Journal, I, 294.]

In 1851, 12 miles from Benares, 160 gold coins of the Gupta kings were found including 71 specimens of Chandra Gupta. [Bengal Asiatic Society's Journal, XXI, 390.]

In 1863 in Kúch Bihár, 13,500 old rupees of the Muhammadan kings of Bengal were dug up. [Royal Asiatic Society's Journal, N. S., II, 145.]

In 1871, in Agra, about 2000 heavy silver coins of Jahángír, 1½ rupee each, were found in a heap of ruins outside the city.

In 1874, in Sonpat, about, 1200 hemidrachmas of the Greek kings of Kabul and the Panjáb were found in the bank of a tank. I have myself received upward of 900 of these coins, and have seen most of the others. They comprised specimens of eleven different kings; one half of the whole number belonging to Menander.

In 1875, at Pesháwar, about 1000 gold *dinárs* of the Indo-Scythian kings Wema Kadphises, Kanerki, Hoverki, and Bazo Deo were dug up in the city, out of which I have seen upwards of 600 specimens.

In 1878, at Sumerpur 12 miles from Hamirpur on the Jumna, 100 silver coins of the Greek kings of Kabul were discovered, comprising specimens of Eukratides, Antimachus, Apollodotus and Menander. Amongst them there were nine didrachmas of Menander.

A very interesting find was also made towards the end of the last century near Benares, as recorded in the following extract from "Nicholls' Recollections and Reflections", Vol. II, p 203 [2 vols. 8vo. London, 1822]

"I was informed by the late Warren Hastings "that, while he was "Governor-General of Bengal, he sent as a present to the Directors of the "East India Company one hundred and seventy-two Darics. They had "been found buried in an earthen pot, on the bank of a river in the "province of Benares. Mr. Hastings told me that when he sent these "coins to the Court of Directors, he considered himself as making the "most munificent present to his masters that he might ever have in his "power to send them. Judge of his surprise when he found on his arrival "in England, that the Darics had been sent to the melting pot."

The same huckstering spirit clung to the Board of Directors until the last, when in a fit of economy they ordered all the gold and silver presents which they had received to be sold. Everything was sent to a silversmith to be valued, including the Græco-Bactrian silver plate with the procession of Bacchus which was presented to the East India Company by Dr. Lord. I have seen the valuation statement of the silversmith, and I was happy to find that this valuable Patera had been saved by Horace Hayman Wilson.

RELICS FROM SISTAN.

The bronze relics given in Plate XIX are also from Ancient Persia ; but they come from *Sistán*, or Drangiana, and were collected by Capt. Hutton in the first Afghân campaign, from whom they came into my possession by purchase along with a small collection of coins.

These bronze objects are of two distinct kinds ; ornaments and weapons. They are all given full size.

Fig. 1 is part of a bird including the head and wing and part of the back. As it is quite flat on the opposite side, I think it may have been part of an ornamental handle of a knife.

Figs. 2 and 3 seem to be portions of personal ornaments, as they have a strong resemblance to some of the gold bracelets given in Plate XVI.

Figs. 4 and 5 are female figures which I believe formed the handles of some unknown instruments.

Figs. 6 and 7 are flat-bladed arrow heads showing two different modes of attaching the head to the shaft.

Figs. 8, 9 and 10 are shouldered or barbed arrow heads.

Figs. 11 to 16 are three-edged arrow heads. They are all hollow, and each has a small hole on one side for fastening the head to the shaft by a cord. Similar arrow heads were found by Morier in the neighbourhood of Persepolis.*

Since this paper was written I have received the first number of Vol. I, of the 3rd Series of the Numismatic Chronicle, containing Mr. Percy Gardner's second notice of some "Coins from Central Asia," including the silver tetradrachma of Andragoras, of which I possess a duplicate. Mr. Gardner is inclined to think that the coins of king Lysimachus, of Tarsus, Sinope, Aspendus and Ephesus, were probably picked up by the collector on the road from the Oxus to India. This opinion is, however, directly opposed to the statements of the collectors themselves, as made to Mr. Grant in 1877-78, and as made to me yearly from 1878 up to the present time. In fact, I have received the impressions of many of these coins just as they were obtained on the Oxus, in letters from Khulm. So far as I have observed there are no western coins in the Oxus find of a later date than Alexander the Great, and as the soldiers of Alexander's army must have carried with them numerous coins from many different places in Greece, I would suggest this as a simple and reasonable explanation of their occurrence in this great deposit. The collectors separated without any hesitation all the coins obtained at other places. These comprised many specimens of Euthydemus, Eukratides and Heliokles, with one or two of Demetrius and a single coin of Agathokles. I have remarked that not a single Parthian coin has been found amongst the numbers that I have seen from the Oxus deposit.

POSTSCRIPT.

Since the above was put in type, I have received another small batch of coins from the Oxus. With these there were in addition 7 gold coins and 11 silver tetradrachmas, all of which were taken possession of by Abdul Rahman's Collector of Customs at Kabul. Amongst the gold coins there is said to have been one of Pharnaspes.

The following is a list of the coins that were brought to me, most of which have passed into my collection. Amongst them there are no coins of a later date than the time of Euthydemus and Antiochus the Great. The continued absence of any Parthian coins also points to a date preceding the reign of Mithridates I., whose coins are so common.

* See Rawlinson's *Ancient Monarchies*, III, 175, 2nd edit.

Silver Coins.

No.

- 2 Silver Darics (Sigli), very much worn.
- 1 Attic Tetradrachma—oblong—archaic type.
- 1 Philip of Macedon, large.
- 1 Alexander, Drachma, much worn.
- 1 Seleukus, Drachma, Elephant chariot.
- 1 Seleukus and Antiochus, tetradrachma, Elephant chariot.
- 1 Drachma—Elephant chariot—a beautifully perfect specimen, legend
 ΒΑΣΙΛΕΩΝ ΣΕΛΕΥΚΟΥ ΚΑΙ ΑΝΤΙΟΧΟΥ.
- 2 Antiochus I.—Tetradrachma—Horse's head.
- 2 Do. Drachmas do.
- 1 Do. Drachma—King's head with helmet and cheek-pieces—
Rev. Victory and Trophy.
- 2 Do. Tetradrachmas—Scated Apollo.

Nickel.

- 1 Agathokles—usual type—ΦΙ in field.

Copper.

- 1 Antiochus I.—Helmeted head.
- 2 Do. Bad coins.
- 3 Diodotus—new type—Demeter in search of her daughter.
- 3 Euthydemus—usual types—Gallop-^{ing} Horse.
- 1 Pantaleon, square, usual types.
- 2 Agathokles, square, usual types.
- 4 Indian coins, square, Lion and Elephant.

Among these there are a few novelties, such as the helmeted Antiochus in silver, and the copper coins of Diodotus. But the gem of this small batch is the beautiful drachma of the "kings Seleukus and Antiochus."



Contributions on the Religion, History, &c. of Tibet.—By BABOO SARAT CHANDRA DÁS, Deputy Inspector of Schools, Darjiling.

• I.—THE BON (PON) RELIGION.

INTRODUCTION.

• Lama Je-tsun-lossaŋ CHHOIKYI-NĪMA pal Ssaŋpo is the author of the well known work “Dub-thaḥ leg-shad śel-kyi méloŋ” which contains short accounts of the various religious systems in ancient India, Tibet, Mongolia and China.¹ The first Lama whose avowed incarnation he is believed to have been was named Chhoikyī wañ-chhyug, whose high dignity was recognised by the Emperor of China, by letters patent and the presentation of a golden tablet,² and who was famous for his knowledge of metaphysics and vyākaraṇa and did greatly enhance the cause of Buddhism. Our author was born, agreeably to a certain prophecy, at Pah-ri in Amdo, in the year *fire-serpent* of the 12th Cycle, *i. e.*, 1674 A. D., and died in the year 1740 A. D. In his boyhood he gave many striking proofs of his powerful intellect. Being a divine personage, he easily acquired proficiency in the several branches of Buddhist sacred literature. After taking the vows of monk-hood, he studied the Sūtras and Tantras under many eminent Lamas, such as Chañkya Rolpai Dorje the spiritual guide of the Emperor Kuenlang (Chhiñ-luñ). On his reaching the proper age he was placed at the head of the Jam-vyañ monastery on the Thī or throne of his predecessors. During his presidency more than 3000 monks used to congregate in the monastery for service. He visited Central Tibet, Tsañ and Sakya, and spent a few years at the Dapuñ monastery in order to prosecute religious studies. Returning to his native country, after a study of seven years, he displayed great learning in metaphysics and vyākaraṇa. At this time he propitiated the gods Hayagrīva, Dorje Phagmo, and others of his tutelary deities. He also propitiated the goddess Pallan Lhamo (Kālī

¹ The Dub-thaḥ śelkyi Méloŋ (grub-mthaḥ śel-kyi mé-lóŋ) contains 12 books. I have made a literal translation of the 8th and 11th books which treat of the Bon religion and the rise and progress of Buddhism in Mongolia. My translations of the 9th and 10th books (on Ancient and Mediæval China) are almost literal. All Tibetan names are spelt as pronounced, except those in the lists on pp. 199—201 which are spelt as written. In Bon the *b* is pronounced as *p* (Pon). The nasal consonants *ṅ* and *ṁ* are transliterated by *ñ* and *ṇ* respectively, and *Ṃ* by *h*, *Ṣ* by *ts*, *Ṣ* by *tsḥ*, *Ṛ* by *ds*, *Ṛ* by *sh*, *Ṛ* by *ss*.

² In the history of Tibet and the lives of Lamas many accounts of presentation of seals and tablets will be found. The custom of presenting seals and tablets and letters patent is still in vogue in Tibet and China. The use of seals by different dependencies of China and Tibet is very carefully watched by the Government of those countries. A change of official seals generally signifies a change of vassalage. Tablets, like diplomas and letters patent, are given to establish a new ruler or governor in power.

of the Hindús) who enabled him, it is said, to render good service to Buddhism. Many Mongolian princes and chiefs became his friends and spiritual pupils, by whose assistance he established five religious institutions. He resided in Peking for more than three years, in order to collect information respecting the various schools of religion which then existed in China, and the ancient ones that had died away. He also carefully studied the national laws and statutes of China from ancient records, and thereby made himself famous. The Emperor conferred on him marks of honour and dignity greater than any that had been enjoyed by his predecessors. He also presented him his own robes, which contained one hundred and eight dragons worked in gold, together with a hundred thousand crowns of silver. The Mongolian princes also, who evinced great faith in his saintliness, made him immense presents. On his return to Amdo, all the chiefs and princes of Mongolia and western China advanced to a distance of six days' journey from the town to pay him homage. Among these princes, the Khan of Lanju and the Viceroy of Tsuñ-tu-fu were very well known. On his arrival at the monastery, the Lamas and monks of the thirteen great monasteries of Amdo made him presents, according to their means and resources. From that time, for a period of twelve years, he devoted himself to the affairs of the monastery and to yoga, after which he attained to the "marvellous state of the gods." At the age of 66, on the 10th of the Lunar month, his person being contracted to a cubit's length, he returned to the land of the blessed. He had finished his work called "Dub-thaḥ śelkyi méloḥ" about a week before his death, which occurred in 1740 A. D. The age of the work is therefore 140 years only.

The following are his principal works :

- (1.) The Legendary biography of Lama Jam-vyañ of Guñ-thañ, in 2 Vols.
- (2.) " " " his predecessors, in one Vol.
- (3.) Hymns and Songs.
- (4.) On the worship of Hayagrīva or "Taden," in 2 Vols.
- (5.) " " Náro kha choimo (a goddess), in 2 Vols.
- (6.) " " Dorje Phagmo, in 2 Vols.
- (7.) On Mathematics (Chronology, Arithmetic and Astrology), in one Vol.
- (8.) On Medicines, in one Vol.
- (9.) On the method of constructing chaityas, sacred pictures and images, in one Vol.
- (10.) On rhetoric, words and versification ; stotras in two Vols.
- (11.) About the history and theories of the reformed, or Gelugpa, school, in 5 Vols.

TIBETAN TEXT.

8th Book of *Dub-thah Selkyi Meloh.*

(ཐུབ་མཐའ་ཤེལ་གྱི་མེ་ལོང་)

བོན་གཞུང་ལས་། བསྐྱེད་པ་འདི་ལ་ཆེ་ལོ་དཔལ་མེད་ནས་བརྒྱ་པའི་བཟང་།
 རྩོན་པ་གཙུག་མཚན་གྱི་བཟང་ནས་ཤང་མ་མེ་སྤྱོད་ཐྱི་བཟང་བཙོ་བཙུང་འབྱུང་རྒྱུ་བས་།
 དེའི་ནང་མཚན་ཆེ་ལོ་བཙུག་པའི་ཕྱི་ཕྱུང་བཟང་བཟང་པའི་གཤེན་པ་མ་དུ་ལྷེད་པོན་
 ཐྱི་རྩོན་པ་ཡིན་ལ་། དེ་ཡང་ཞང་ཞུང་གི་ཡུལ་གྱི་འོལ་མོ་ལུང་འིང་ཕྱ་གཤེན་པ་མི་
 པོ་ཆེ་ལྷ་བཟང་། དེ་འབྲུག་ཞིག་གིས་སངས་རྒྱུ་གྱི་རྩམ་འབྲུག་ཡིན་རྒྱུ་ཞིང་།
 བདག་ཅག་གི་རྩོན་པ་དང་ཕྱི་ཕྱུང་མཚན་ལྷ་ལྷུང་ཞེས་ཁྱད་རྒྱུ་། བེད་པ་དཔལ་པོ་ལས་
 ཞང་ཞུང་ཡུལ་གི་བོན་འབྲུག་པར་། དཔེད་སྤྱོད་ཀྱི་གཤེན་པ་མི་པོ་ལོ་ལྷུ་ལ་། བོན་གྱི་
 མཚན་པ་བརྒྱ་གཤིས་བསྐྱེད་སྤྱོད་། ཤེག་པ་འིམ་པ་དབྱེ་རྒྱ་གསུངས་། གསོན་པོ་རྩམས་
 གྱི་ལྷ་སྤྱོད་། གཤེན་པོ་རྩམས་གྱི་རྒྱ་སྤྱོད་པར་། འབྲེལ་རྩམས་གསུང་རྒྱུང་ལམ་ལ་
 བསྐྱེད་། རེས་འབྲུག་ལ་། གང་ལྟར་ཡང་མངོན་ཤས་དང་རྒྱུ་འབྲུག་རྩམས་པ་སོགས་གྱི་
 ཡོན་ཏན་དང་ལྷན་པ་ཞིག་ལྟེ། འོན་མའུ་གསེར་ཁང་རྩེ་ཞེས་ད་ལྟར་མའུ་འིས་ལྷ་
 རྩེད་ཆགས་པའི་གསུང་འདི་དང་། འི་བ་འཁོར་ཆེན་སྤྱངས་པ་། གོང་ཡུལ་རྒྱ་རྩེ་ཁང་
 གི་ཤར་ལྷོ་གསུང་བོན་འིམས་སོགས་བོད་ཀྱི་གསུང་རྒྱ་མའུ་འོངས་ནས་ལྷོད་པའི་ལྷ་གཤེན་
 མང་པོ་ལམ་ལ་བསྐྱེད་ཤིང་བཟུལ་པར་གསུངས་། དེས་གསུང་རྒྱུང་གི་ཆོས་སྤྱང་སྤྱོད་
 བཞི་མཚན་ལྷ་སོགས་བསྐྱེད་། གཙང་འཛོལ་ལྷ་རྩེ་ལྷེ་རྒྱུ་། ཏ་རྩེ་གི་མཁས་པ་
 རྩེ་རྩེ་ཏ་ཏ་སེ། ཁྱི་ཤོག་པར་རྩེ་མ་། འབྲེལ་འོ་ལྷ་པར་མ་། ཐུ་གའ་ཐུ་མཁས་པ་ལྷ་
 བདག་ལྷུངས་ཞོ། ཐུ་ནག་གི་མཁས་པ་ལྷེ་གསུང་ཏང་སྤྱངས་པ་། ཁྱི་ཐུ་མཁས་པ་
 གསེར་རྩེ་ལྷེ་འབྲུམས་། བོད་ཀྱི་མཁས་པ་ལྷེ་ཐུ་རྩེ་ཏང་སྤྱངས་། མི་ཉག་གི་མཁས་
 པ་ལྷེ་རྩེ་ཏང་སྤྱངས་། ལྷུ་མ་པའི་མཁས་པ་ལྷེ་སྤྱངས་གསུང་ཏང་། ཞང་ཞུང་གི་
 མཁས་པ་ཤེར་ལྷེ་རྩེ་ཏང་སོགས་རྩེས་འབྲུག་མང་ཕྱུང་བས་བོན་ཆོས་ལྷོ་གསུང་འམས་
 ཅད་རྩེ་ལྷེ་ཏང་པར་ལྷུ་སོ། བོད་རྩེ་ཏང་པའི་བོན་ལ་། འཛོལ་བོན་།
 ལྷུ་ཏང་བོན་། བསྐྱེད་པོན་གསུམ་ལས་། དང་པོ་ན། གཤེན་ཁྱི་བཙོན་པོ་ནས་ཐུལ་
 པས་རྒྱུ་པ་ཁྱི་མེ་བཙོན་པའི་རྩེ་ལྷེ་དབྱུང་འམ་ཤིང་འོན་ལྷེ་པར་རྩེས་གཤེན་ཡིན་
 པའི་ཐུལ་པ་ལོ་བརྒྱ་གསུམ་འོན་པ་ཅིག་འཛོལ་ལོ་བརྒྱ་གསུམ་ཐུ་པར་རྩེ་བོད་ཁམས་

མི་སྒེ་བཅད་པས་། བོན་ཆོས་སྒྲུབ་ཆས་བསྐྱུང་འཕྲོ་དང་བཅས་པ་གདུང་ཅ་ཐུས་པ་
 ཆོས་ལྟེ་ལྟ་བཞེན་པ་ལ་བོན་གདུང་མ་ཡོན་རྒྱུ་། གཞུ་པ་ཤ་མའ་བསྐྱུང་པ་ནི་།
 རྒྱུང་དང་མིས་བསྐྱེད་པ་བལྟ་བུ་རྩེ་། གཙོང་གད་ལྟོད་ན་གཤེན་རྒྱུ་ལྟ་དགའ་ལྟ་
 བས་། དེ་ལྟ་སྒོ་ལམ་ལྟ་བ་དབྱས་མི་བོན་གཙུག་ཅིག་ཏུ་སངས་རྒྱུ་མི་བཀའ་
 མང་པོ་བོན་ཅ་བསྐྱུང་དེ་། ལུས་རྒྱུ་པ་ལ་ཁམ་ཆེན་། ཉི་ཤུ་ལྟ་པ་ལ་ཁམ་རྒྱུང་།
 གདུག་ལ་དབལ་པ་ལ་བོན་མདོ་། གཞུངས་སྒེ་ལྟ་ལ་རྒྱུ་འབྱུང་དགའ་ཆུང་ཅས་
 བཀའས་། བཟོ་ཆད་དང་བཟོད་ལྟ་ཆོས་དང་མི་འད་པ་ལྟ་ཆོས་ལྟས་དེ་། མཆོ་ལྟ་
 འཕྲུ་རྒྱུང་ཆུང་ཆི་བལ་ལ་གདུང་ཅ་ཐུས་། མིས་ལྟ་ཁོ་རྒྱུ་ཆི་ལ་ཉི་ཤུ་ལྟས་བཞེན་།
 དེ་རྩེ་རྒྱུང་པོ་བོན་ཞིག་ལ་སོགས་པས་ཀྱང་དེ་འདྲ་མང་ཅ་བསྐྱུང་། བསྐྱུང་བོན་ལྟ་
 མི་བའ་གཞུག་པོ་དེ་ལ་ཆབ་དགའ་རྒྱུ་དེ་འབྱས་སྐྱེ་བོན་ཅས་མིང་བཀའས་སོ་།
 བོན་མི་ཆོས་ལ་བཀའ་འབྱུང་ལྟ་ཆི་ཆོས་ཡོད་ཅིང་། ལྟ་བ་ལྟོན་པའི་གཞུང་།
 རྩོགས་པ་རྩོན་ཆེན་གསེར་མི་འབྱུང་བ་། སྒྲ་འབྲེལ་རྒྱུང་ཆི་སྐྱུ་ལྟ་། མན་ངག་
 འཕྲུ་ལོ་འཕྲུ་གསལ་སོགས་དང་། རྩོག་པའི་གཞུང་། རྒྱུང་པོ་རྒྱུ་འབྱུང་ཤིག་ལོ་
 དམ་སྒོར་། གསེར་ཤིག་། ལྟས་སོགས་གཙུག་ཏུ་། སོགས་ལྟ་ལྟ་ལྟ་ལྟ་ལྟ་ལྟ་ལྟ་ལྟ་
 སོགས་དང་། རྩོད་པའི་སྒོར་ལ་། ཁམས་བཅུད་གདུག་ལ་ཡབ་པའི་འབྱུང་། ཡེ་
 གཤེན་བཀོད་པ་དེན་མི་འབྱུང་། གཞུང་རྒྱུང་ས་བཅུ་ལམ་མི་འབྱུང་། ཆོས་དག་རྒྱུ་
 རྩོགས་འབྱུང་པའི་འབྱུང་། དག་རྒྱུ་ཆོས་ཆེན་ཆོས་པའི་འབྱུང་། གཤེན་ཡང་ནད་
 འབྱུང་གས་པོ་ཆེ་འབྱུང་ཁ་པོ་། རྩོན་འབྱུང་དགའ་པོ་། གདོ་འབྱུང་གས་པོ་སོགས་
 དང་། འབྲེན་ལས་མི་སྒོར་ལ་། གདོ་ཤལས་ལྟས་བཅུ་རྒྱུ་ལྟ་། དཔལ་ཤལས་བཅུད་
 རྩོ་བཞི་ལྟ་། རྒྱུ་སྒོར་བཞི་། རྒྱུ་ཅོང་བཅུད་། མི་ཤལས་ལྟས་བཅུ་རྒྱུ་ལྟ་། འབྲེན་
 ཤལས་བཅུད་རྩོ་རྩོ་གཅིག་སོགས་དེ་དེ་ལ་ཆབ་གས་མིང་བ་རྒྱུ་མི་བོན་རྒྱུ་། བསྐྱུང་
 རྩོགས་འབྱས་སྐྱེ་སྒོར་ལ་། རྩོ་རྒྱུངས་བོན་མཆོད་། ས་རྒྱུད་རྩོ་པོ་དམ་འབྱུང་། མ་
 རྒྱུད་ཉི་མ་དམ་མའ་། རྩོ་རྒྱུད་མདོ་ཆེན་འབྱུངས་པ་སོགས་དེ་དེ་ལ་ཆབ་དགའ་ལྟ་གས་
 མི་བོན་ཅས་རྒྱུ་། རྒྱུང་མའི་སྒོར་ལ་། རྩོ་ག་སྐྱུ་ལ་པར་ཆེ་རྒྱུང་། ཅ་པ་རྒྱུ་མི་
 དམའ་གས་། དལ་འབྱུངས་མ་མའི་ལྟ་རྒྱུ་པ་སོགས་དང་། མོ་ག་བཅུད་། རྩོ་པོ་
 བཅོམ་། དམ་རྒྱུ་གཞུག་དབང་རྒྱུ་པ་སོགས་མི་རྒྱུ་པ་སྒོར་དང་། རྩོ་པོ་ལྟ་པོ་ལྟ་པོ་
 ལོ་དམ་སྒོར་། གདུང་མི་སྒོར་། རྩོ་ལྟ་པ་ལྟ་པ་རྒྱུ་ལྟ་པ་མི་སྒོར་སོགས་ཡོད་ཅས་

རྩེ་འོ། གཞུང་དེ་དག་མ། མི་རིག་པ་དང་། ལས་འབྲེལ། རྩམས་
 ལྷིང་རྩེ་ཐུང་རྒྱུ་ཁྱི་སེམས། རྩིན་རྩུག་སོགས་ཁྱི་གཞི་ཤར་ཤོར་དང་། ལས་
 ལུས་བརྒྱ། ལྷ་གཞུག་སོགས་ཁྱི་ཅིམ་བཞུག་ཐུང་ཐུས། དཔལ་བསྐྱེད་ལྷོགས།
 དམ་ཤོམ། རྩལ་མཉམ། རྩིན་ལྷོགས། དཔྱིལ་འཇོམ་རྒྱུ་བ་མཆོད། གཤིན་ཆོག་
 སོགས་ཁྱི་དོད་དང་ལས་ཁ་ཆོར་བ་མང་། བཤད་རྒྱུ་ལ་སངས་རྒྱུས་ཁྱི་ཆོས་དང་
 དཔྱིལས་མཐུན་པ་དང་མི་མཐུན་པ་ཅི་འིགས་དང་། སངས་རྒྱུས་ལ་ལེ་གཤེན་ཏེ་
 ཤལ། ཆོས་རྒྱུ་ལ་ཤོན་རྒྱ། ལྷམ་ཆེན་མོ་ལ་ས་ཇི་མེ་སང་། ལོངས་རྒྱུ་ལ་
 ལྷན་མ་བཟང་པོ། ལྷལ་རྒྱུ་ལ་ལྷོད་པ་སང་པོ། དམ་བཅོམ་ལ་གཤེན་སྤྲུལ། ཐུང་
 སེམས་ལ་གཞུང་རྩུང་སེམས་དཔལ་གྱི་མ་ལ་དཔོན་སྤྲུལ། ལྷོང་གིད་ལ་ལྷོ་གིད།
 ས་བརྒྱལ་ལ་ཇི་མེད་ཤེལ་ཁྱི་ས། ལོད་རྩེ་འོ་ལྷོ་བ་འཇམ་ལྷན་ལྷོང་གི་ས། ཐུག་ཁྱི་
 བརྒྱུ་བའི་ས་སོགས་ཁྱི་མིང་བཏགས་པས་མཆོག། བར་ཆད་དང་མིང་འདོགས་རྒྱ་
 འདོད་ཁྱུ་བ་མང་ཟ་ལྷང་། ལྷ་ལྷོམ་སོགས་ཁྱི་འདོད་རྒྱུ་ལ། ལྷོར་བཞོན་ལ་ཁྱི་བཞོན་
 དང་ཅང་བཞོན་གཤིས་ལོད་པར་གཞུགས་ཤིང་། བཞོན་གཞུང་འགའ་ཞིག་མ། དང་པོ་ལེ་མེད་
 ལྷོང་པ་ལ། དེ་ནས་ལེ་ལོད་རྩུང་ཟད་ལྷོད། དེ་ནས་བ་མོ་རྒྱ་ཅིམ་ལྷོད། དེ་ནས་རྩལ་
 བ་ལྷམ་ཅིམ་ལྷོད། ཅིས་སོགས་རྩེ་ཅས། མཤར་ལྷོད་བརྒྱུད་ཤམས་ཅད་རྩོད་ལས་
 ལྷོས་པའི་ལྷགས་དང་། ལྷ་དང་དཔལ་ལྷུག་སོགས་ཁྱིས་ལྷས་པའི་ལྷགས་ལྷ་ལྷང་བ་
 ཅིམས། ལྷ་ལྷུགས་ཁྱི་ལྷ་བ་འཇུར་བ་ལྷོན་ཅིས་འཇུག་ལྷོ་ལྷོ་ལྷོ་ལྷོ་ལྷོ་ལྷོ་ལྷོ་ལྷོ་ལྷོ་ལྷོ་
 ཤིང་། དྲིང་སང་ལྷན་ལ་དར་ཆེ་བའི་གཞི་ཆོག་ཅིམས་ལྷ་ལྷང་གོང་གི་ཆོག་དེ་འདྲ་བ་
 མང་པོ་ལྷང་དོ། །ལྷང་བཞོན་གཞུང་འཇུག་པ་འིན་པོ་ཆེད་རྒྱུད་ལྷ་བ་མ། ལྷན་ལྷོ་བ་
 ལྷ་ཅི་དངོས་ཅིམས་ཞེན་པས་ལོད། དམ་པའ་དེན་རྩུ་ཆགས་པ་ལྷངས་པས་མདོ། གཤིས་
 ཀ་སེམས་ཁྱི་ཆས་རྩིན་མ་ཆགས་མ་ལྷངས་པས། ལྷོང་པ་གདོ་ལྷོ་ལེ་ཤེས་ཞེས་ལ། མི་
 རྩོག་ལོངས་ཁམ་གསལ་དངས་མ། ལྷོམ་པའ་དངོས་པོ་དེ་གིད་ལོན། དེ་ལྷོར་ལྷ་ལྷོམ།
 གཤིས་ཀ་འབྲེལ་བར་ལྷོད་མ། ལྷོ་བ་འདི་ལ་ཤར་པའི་འབྲེལ་རྩེ་ཤོས་པར་དེས། ཞེས་
 སོགས་ཁྱི་བཤད་རྒྱུ་ནི། བཀའ་དང་བཤུན་བཅོས་ནས་བཤད་པ་དང་དེན་འཇུག་པར་
 ལྷང་ཞེས་ལྷན་ལྷོར་ལྷོ་ལོས་རྒྱུ་མཆོན་ཁྱིས་གཞུངས། ལྷང་ལྷན་མཆོན་ཤེར་ལོད་དང་།
 ལྷང་ཆོང་ལོ་རྒྱུ་བས་བཞོན་ཁྱི་ཤེས་པ་དབྱེ་འིམ་པ་གིད་མའི་ལྷོགས་ཆེན་དང་མཐུན་པར་ལྷང་
 བཤད་དོ། ཁོ་བོས་མཐོང་བའི་བཞོན་གཞུང་ཞིག་ན་འདི་ལྷོར་ལྷང་ལྷོ། གཞི་རང་བཞིན་

མོམ་མེད་དང་ཡོད་པ་མེད་ཅུ་གསུམ་པ་བྱུང་ན་དང་མོམ་ཆད་ཅུ་ལའོལ་པ་ཡིན། གསུམ་
 པ་ནི། དེ་ལྟ་བུའི་རིག་པ་དེ་གམས་སུ་སྤངས་པས་དོན་མདོན་ཅུ་ཐུང་དེ་བསྒོམ་ཕྱིད་
 ལས་འདས་པ་ནི་མ་མཁའི་དེ་བོ་ལྟ་བུ་འཛིན་དོན་སྤྲོད་ལས་འདས་པ་ཅིག་འབྱུང་། དེ་རྩ་
 ན་གོན་མོད་པ་ཐམས་ཅད་ཡོ་ཤེས་སུ་འཁར། ལྷུང་པ་ཐམས་ཅད་པོན་དཀྱིད་ཅི་མི་
 དག་ཅུ་དོན་པ་ཏེ། འཁོར་འདས་པ་ཐད་དཀ། ལྷུང་སྤང་། དཀྱིད་མེད་འོ་གཅིག་
 པར་ཐུང་ནས་པོན་སྤྲོད་པར་སྒྲིབ་པས་སྤོང་སྒྲུལ་ཐད་པར་སྤྱེལ་པའོ། ཞེས་བྱུང་དོ།
 འདི་དག་ནི་ཕྱིས་ཀྱི་ཐོགས་ཆེན་པས་རྩེ་ལྷན་པས་དང་དཀྱིད་པས་མཛོད་པས་འདུག་པས།
 པོན་ཆོས་གཉིས་ལྷན་ནད་གསུམ་པོ་ཡོད་འདུའོ། ཐོག་པ་རིམ་པ་དཔྱད་པོན་ཀྱི་
 གཞུང་བཙན་རྩེ་ཏེ། དམ་ནི། ལྷ་གསེན། ལྷུང་གསེན། འཕྲུལ་གསེན། ལྷུང་གསེན་
 ཏེ་ཐུའི་ཐོག་པ་བཞི། དག་བསྟེན། ཨ་དཀར་ཅད་སྟོང་། ཡོ་གསེན་དེ་འབྲས་སུའི་ཐོག་
 པ་བཞི། ཁྱད་པར་ཆེན་པོའི་ཐོག་པ་གཅིག་ཕྱེ་དཔྱེའོ། །ལྷ་གསེན་ལ་གཏོ་སུམ་བཅུ་
 རྩུག་རྩ། དཔྱད་བཅུད་འི་བཞི་ཕྱོད་། ལྷུང་གསེན་ལ་ཐུང་སྒྲུལ་པ་བཞི། སྤང་ཅོད་
 བཅུད། གཏའ་རྩལ་པའི་བཅུ་ཙ་གསུམ། འཕྲུལ་གསེན་ལ་ལྷ་ཕྱེད་ཏེ་འཕྲུལ་ཕྱི་གཞུང་།
 ལྷུང་གསེན་ལ། ནི་ཐམས་སུམ་བཅུ་རྩུག་རྩ། འཕྲུལ་སྤང་བཞི། འཕྲུལ་ཐམས་བཅུད་
 རྩ་ཙ་གཅིག།

དག་བསྟེན་ལ་ལྷུང་བཅུད་འབྱུང་ཐོགས་ཀྱི་མདོ་སྟོན་པས་དང་། ཅད་སྟོང་ལ་
 འབྲས་སྟེ་སྟེ་བཞི་སྟོན་པས་དང་། ཨ་དཀར་ལ་ཐུང་ལྷུང་ཙ་མ་དང་། ཡོ་གསེན་ལ་
 སེམས་ལྷུང་སྟེ་བཞི་དང་། ཁྱད་པར་པ་ལ་མན་དག་སྟེ་ལྷུང་ཡོད་རྩེ། ཐུང་པོན་
 བཞིས་གཞུང་འཛིན་ཀྱི་དོན་པ་ཆ་བཞི་ཕྱོད་། དག་བསྟེན་ཅད་སྟོང་གཉིས་ཀྱིས་གོན་སྒྲིབ་
 ཐུང་། ཨ་དཀར་ཡོ་གསེན་གཉིས་ཀྱིས་ཤེས་སྟོན་ཕྱོད་། ཁྱད་པར་ཆེན་པོས་ལྷན་
 སྟེས་ཅད་ནས་གཅོད། ཡང་ཐུའི་པོན་བཞིས་བསྟེན་པ་ཅུ་མའ་སྤངས་པས་མོས་སྟོད་
 ཁྱིམ་པའི་ཐོབ། དག་བསྟེན་དང་ཅད་སྟོང་འིས་བསྟེན་པ་སྤངས་མེད་གཞུམ་ལ་ལམ་
 པ་སྟོད་ནས་ཐར་པ་ཐོབ། ཨ་དཀར་ཡོ་གསེན་ཀྱིས་ཐུང་པ་གཅིག་ལ་མཐར་པ་ཐོབ། ཁྱད་
 པར་ཆེན་པོས་ཆེ་གཅིག་གིས་པོན་སྤྲོད་པ་ཅིས་བཅད་དོ། པོན་རི་ལྷུང་དེ་པ་དང་
 འདི་དཀྱིལ་ཅིམས་ཞིལ་ཅུ་བཅད་པའི་གཞུང་མ་ཆོད་པས། པོད་ཅུ་ལྷུང་པར་གཞུམ་ཅུ་
 འབྱུང་ཆོལ་ཅིམས་འབྲི་ལྷུང་དཀོད་པ་གཅིག་ལས་གསུངས་པ་ལྷུང་དང་། ལྷ་སྒོམ་དང་
 ཅིག་པ་སྟོན་ཀྱི་འདི་དཀྱིལ། ལྷལ་མད་མཁར་གསང་པའི་པོན་སྤྲོད་ཅུ་། ལྷག་

of Bon pilgrimage in Tibet on the east of the monastery of Pu-chhu-lha-khañ in Koñ-yul, Ñah-ser-khañ-tse on the site of which was established the monastery of Ñah-ri-tva-tshañ, the hill called Rin-chen puñ-pa, &c., he subdued many earthly demons and evil spirits, all of whom he bound under solemn oaths. He explained the four ways of Bon *svastika* and *skandha* and the five repositories of sacred scriptures. Among his spiritual descendants, there were the six who bore the surname of Mu-tsho and Dem, the Persian sage named Mu-tsho-tra-hé-si, The-thoñ-par-tsam, Guhi-li-barma, the Indian Pandit Deva Nátha surnamed Mantra-ushma, the Chinese sage Leg-tañ-mañ, the learned priest of Thom named Ser-dog-che-chyam, the Tibetan sage Dem-gyen-tsha-mañ, Che tshagargu the learned scholar of Mi-ñag (Burmah), the erudite Mupañ-sañ of the Sumpa country, and the sage S'er-pu-chhen of Shañ-shuñ; these and many other followers, carrying the doctrine to all quarters, diffused the Bon religion.

In Tibet the Bon religion presented itself as 1st, Jola-Bon; 2nd, Khyar-Bon; 3rd, Gyur-Bon.

1st stage Jola Bon.

During the reign of king Thi-de-tsanpo, the sixth in descent from Ñah thi-tsanpo, in the province of Ü, also called Shoñ-hon, a boy belonging to the family of S'en, at the age of thirteen, was kidnapped by a goblin, who took him to different places and mountains of Tibet and Kham. After rambling thirteen years with the goblin, the boy, fully instructed in demoniac crafts, being now twenty-six years of age, was returned to the society of men. He could point out the haunts of malicious spirits and goblins, and tell that such and such a demigod and demon lived in such and such a place, who committed mischief and good of this and that kind, and that they could be propitiated by a certain kind of worship and offering. He gave an account of different descriptions of "*ye-tag*" or mystical offerings.⁷ Twenty generations of Tibetan kings, from Ñah-thi-tsanpo down to Thi-jé-tsanpo, are said to have followed no other religion than the Bon. It is evident that the first introduction of the Bon religion in Tibet was due to this man. However, the Bonpo of that age were skilled in witchcraft, the performance of mystical rites for suppressing evil spirits and cannibal hobgoblins of the nether region, the invocation of the venerable gods above, and the domestic ceremonies to appease the wrath of malignant spirits of the middle region (Earth) caused by the "pollution of the hearth."⁸ Besides

⁷ They are prepared, like the masts of a ship, with stretched threads and ropes.

⁸ *Thab-den* or "the ejecting of defilement from the hearth." In Tibet and its neighbourhood from time immemorial the defiling of the hearth by the overflowing of boiled milk, broth of meat, or of any other thing edible or useful (except water) from any utensil, is considered to be a great calamity which brings immense trouble to

these there did not then exist any other theories or works concerning the Bon religion. In (some historical works such as) the Gyalrab and Chhoi-juñ

the owner. When a cook-house containing a hearth is so defiled, the owner must immediately cleanse it out; the ground which held the hearth should be dug out and thrown into water, in default of which the demons and the gods of the middle region, "Sa-dag" (or Nágas), become annoyed and punish the owners or defilers with the disease of leprosy. In order to escape such punishment, that is, to be cured of leprosy, the patient goes to a male or female Bon priest in quest of a remedy. He requests him or her to examine his fortune; the priest of course attributes the disease to defiling of the hearth, and requests the patient to recollect the places where he ever cooked food or boiled anything. The names of all those places being given, the priest casts lots and finds out the right place and arranges for the ceremonies of cleansing the defiled hearth. Not all priests can claim to perform the ceremony, but the patient invites the priests of the country who assemble in an open place and cast lots to find out what particular priest would be acceptable to the "Sa-dag" for the purpose of officiating at the ceremony. The fortunate man being picked out, the service commences. He strictly abstains from the use of spirits and meat for the time being, as the "Sa-dag" are prejudiced against their use. The priest now invokes his tutelary deity called Kah-bab, and Thab-lha the god of the hearth, who, by turns taking possession of his body, lead him to the particular spot where lies the defiled hearth. Arrived at the spot he plants his arrow-flag called "Dah-dar." As soon as this is finished, the spirits withdraw and the priest comes to his senses, when he inquires from those around him what inspired sayings he had given out. Being told every detail of the affair, he goes on to conduct the usual prescribed ceremonies. He or she (female priests are preferred) then in an authoritative tone summons the eight demi-gods (gods, nágas, yakshus, demons, genii, Pehar Gyalpo, mischievous female spirits called Mamos, and malignant planets such as the Indian Ráhu) and tells them—"I, according to the command of S'en-rab mipo the lord of the Bon religion, am conducting this ceremony. Ye all listen to what I say:—I shall just cleanse the polluted hearth of its defilement, in which work I exhort you all to help me. Remember, that I act like a tool in your hands, all success rests on your ingenuity. Wherefore be kind and merciful to me!" He now chants the usual *mantras* and conducts the ceremony.

When the first part of the service is over, he invokes his own Kah-bab, together with Thab-lha the god of the hearth, saying, "O Kah-bab &c., my appointed friends and guardians, and ye hosts of ancestors, vouchsafe me your aid at this critical time. If I fail in my object, disgrace shall fall on me and also on you all who favour me!" He concludes his invocation by a threat, saying, "if you do not make me successful, I shall henceforth withhold the paying of reverence and offerings to you all." He then finishes the service by ordering a host of diggers to dig out the spot indicated, to the depth of about 8 or 10 feet. He briskly walks round the ditch, his heart beating with the fear of missing the ball hid in the polluted ground. When the proper moment arrives the Kah-bab and Thab-lha by turns inspire him, when he throws himself into the bottom of the ditch in a senseless state and picks out the polluted ball. The Kah-bab having immediately withdrawn, the priest regains his senses and produces the ball before all who remain present and breaks it to examine the contents. If a living or dead larva of an insect of any kind is found within it, the operation is considered successful, otherwise not. If the ball be empty, the leper's case is considered hopeless, since the devil, born as a larva within the defiled ground soon after the

the progress of the Bon religion is traced from the reign of king Di-gum-tsanpo. This stage of the Bon religion is also called Gyu Bon Chhab-nag.⁹

2nd Stage, Khyar-Bon.

When king Digum tsanpo was assassinated, the Bon priests, not knowing how to conduct the funeral rites (so as to prevent his spirit from doing mischief to the living), invited three Bon priests, one from Kashmír, a second from the Dusha country and a third from the country of Shañ-shuñ, to perform the "funeral of the stabbed". One of these priests propitiated Ge-god khyuñ and Me-lha the god of fire, and thereby was enabled to travel in the sky, mounted on a tambourine, and to discover mines. He could perform miraculous feats, such as cutting iron with the quills of birds, &c. Another priest was skilled in delivering oracles and telling fortunes by *Jutika* and by deciphering mystic symbols on the fresh human shoulder-bone and thereby divining good and evil. The third priest was famed for his skill in conducting the funeral ceremonies of the dead, especially of those murdered with knives, &c.

Previous to the appearance of these Bon priests there existed no Bon religious theories. Since their time the Bon doctrines have come into existence. This stage of the Bon religion called Khyar-Bon (*i. e.*, erroneous Bon) was mixed up with the S'aiva doctrine of the Tirthikas.

The 3rd Stage or Gyur-Bon.

• This is divided into three Sub-stages.

1st Sub-stage.

An Indian Pandit, having profaned some sacred Buddhist *Āchāra* and having been charged with immorality, was expelled from his congregation. He went towards the north of Kashmír where, dressed in a blue gown, he proclaimed himself a great teacher. He wrote some heretical works, which he hid under the ground. After the lapse of a few years, he invited the public to witness the discovery by him of some ancient religious works. Thus a change was wrought in the Bon religion.

pollution of the hearth, and having got its wings, has fled towards the sky where he is out of reach. This indicates that a long time has elapsed since the defilement of the hearth. If a larva is found, it is immediately killed to ensure the cure of the leprosy. A dead larva inside the ball shows that the cure is at hand. The ball of earth is used as a charm against evil spirits. If the officiating priest fail to discover the defiled ball, he is considered an impostor. If it is found, no matter what its contents are, the priest must be rewarded suitably. He generally claims the limbs and head of the sacrificial animal, be it a cow or a pig, together with a complete suit of wearing apparel, called *Lu-gañ*. These rewards collectively are called *Lags-sol*. Animal sacrifices form an important part in the religious observances of the Bonpo.

⁹ Or the original Bon of the dark valley, meaning dark age.

2nd Sub-stage, middle Gyur-Bon.

During the reign of king Thi-sroñ de-tsan, an edict was issued requiring all the Bonpo to renounce their faith and embrace Buddhism. The Minister Gyal-vai chañ-chhub requested the Bon priest named Rin-chen chhog to adopt Buddhism which he declined to do. Having been punished by the king for his obstinacy, he became greatly enraged, and, in company with some other Bonpo, secretly composed Bon scriptures by means of wholesale plagiarism from Buddhist canonical works. The king hearing that the excellent sayings of the Tathágata had been converted into Bon scriptures, ordered the priests to be beheaded. Many of the Bonpo were thus killed; the rest secretly multiplied their works and, through fear, concealed them under rocks. Afterwards they brought out their religious books from the various hiding-places, in consequence of which those books are called *Bon ter-ma*, or "the hidden treasures of the Bonpo."

3rd Sub-stage, last Gyur-Bon.

Subsequent to the overthrow of Buddhism by Lañdarma, two Bon priests named S'en-gyur and Dar-yul dolag, from upper Nañ in Tsañ, sitting in a solitary cavern in U, consecrated as a place of Bon religion, altered many Buddhist works¹⁰ by using an orthography and terminology different from those of the Buddhists. These they concealed under the rock of Tsho-ña deu-chhuñ. Afterwards they brought the hidden books to light as if they were accidental discoveries.

Afterwards Khyuñ-po and other Bon priests, in the same manner, converted other Buddhist works into Bon scriptures.

These three stages of Gyurpa-Bon, viz., the first, the middle and the last, are designated by the name of Chhab-kar or Dapui-Bon, meaning "the white-water (enlightened) or the resultant Bon."

The Bonpo are said to have got the counterparts of the Kah-gyur in general. The following are the names of their principal religious books and deities.

BON RELIGIOUS WORKS.

I TA-VA-STON-PAI-GS'U'Ñ. Philosophy and metaphysical works.

1. *Rdsogs-pa rin-chen gser-gyi kphreñ-va*.
2. *Rtsa'grel rluñ-gi spú gú*.
3. *Man-ñag kkhor-lo ñod-gsal*.

¹⁰ The Buddhist scripture—

Yam gya-pa	was converted into, and given the Bon name of,					Kham-chen.
Ni-shu ñapa	"	"	"	"	"	Kham-chhuñ.
Don-la bab-pa	"	"	"	"	"	Bondo.
Ssuñ dé-ña	"	"	"	"	"	Lubum-kah.

II. *SGOMPAI-GS'UN* or meditative works.

1. Phuñ-po rañ-hgyur thig-lé *dgu-skor*.
2. *Gser-thig*.
3. *Lus sems ñamsmyóñ*.
4. *Sems lúñ ye-khri-dkar po*.

III. *SPYOD-PAI SKOR LA* or Serials of rites.

1. *Khams brgyad gtan la phab-pai kbum*.
2. *Ye-gshen bkod-pa don-gyi kbum*.
3. *Gyuñ-druñ sa-bchú lam-gyi kbum*.
4. *Rnam-dag tshul-khrims hdul-vai kbum*.
5. *Dge-rgyas tshogs-chhen rdsogs-pai kbum*.
6. *Nad kbum nag-po*.
7. *Tshe-kbum khra-vo*.
8. *Sman-kbum dkar-po*.
9. *Gto-kbum nag-po*.

IV. *APHIRIN-LAS-SKYI SKOR LA* or Serials of epistles.

1. *Gto-thabs sum-brgya-drug-chú*.
2. *Dpyad thabs brgyad khri bshi-stón*.
3. *Kyer-sgom bshi*.
4. *Skod choñ-rgyad*.
5. *S'i-thabs sum-brgya drug-chú*.
6. *Hdul-thabs brgyad-chú rtsa-gchig*.

These works are also called the Bon works of Chhab-nag *srid-rgyud* or the mystical works of the Dark world.

WORKS OF BON MYSTICISM.

The following are the Mystic works of the Chhab-dkar period or the later period :

1. *Spyi-spuñs bon mdsód*.
2. *Pha-rgyud drag-po dgu hdus*.
3. *Ma-rgyud ñi-ma dgu-sar*.
4. *Khro-rgyud mdo chhen kbyams-pa*.

The following are the names of the principal Bon gods and goddesses.

- | | |
|---|---|
| | 1. <i>Srog-gi sag-brdar-chhe</i> . |
| | 2. " " " " <i>chhúñ</i> . |
| The red wrathful razor spirit. | 3. <i>Dra-va spu-gri-dmar</i> . |
| The black " " " | 4. " " " " <i>nag</i> . |
| | 5. <i>Ñal-kbyams ma moi khrag sgráb</i> . |
| The tiger god of glowing fire ; he is the popular god universally worshipped. | 6. <i>Stag-lha me-kbar</i> . |

The messenger-demon.	7. Pho-ña bdud.
The well known Pehar-rgyalpo.	8. Rgyal-po.
The god of sound.	9. Sgra-lha.
The great demon.	10. Btsan.
•	11. Gsas gdañ.
	12. Dmú.
	13. Klú.
	14. Gssah.
	15. Dvañ-phyug-gi sgrub skor.
	16. Byol-són kkhlor lo dgú-skor.
	17. Gtañ-kyi-skor.
	18. Ro-ku-śag-pa spyañ-rgyug-gyi-skor.

In those Bon scriptures are taught the unsteadiness of all things, *karma*, *phalam*, love and compassion, the *Bodhisattva* feelings; the aphorisms of the six páramitá; the five ways (of emancipation), the ten *bhúmis* (the stages of perfection); the nomenclature of the three images &c., inauguration, formation and perfection (ceremonies) vows, sanctification (consecration) or sacrifice (*yajña*), construction of circles and figures of mystical worship, funeral ceremonies and many other like rites and ceremonies as are similar in form and nature to those of the Buddhists. In the place of

Buddha	they have	Ye-sen-té thal.
Chhoiku or Dharma káya	„ „	Bon-ku.
Yum-chen mo	„ „	Sa-tri-é sañ.
Loñku (Sambhoga káya)	„ „	Kuntu-ssáñpo.
Tul-ku (Nirmāṇa káya)	„ „	Sridpa-ssáñpo.
Dá-Chompa (Arhat)	„ „	S'en-sra.
Chyañ-sem (Bodhisattva)	„ „	Yung-druñ sempah.
Lama (guru)	„ „	Bon sa.
Idea of Vacuity (śúnyatá)	„ „	• Hāmo-ñid.
Sachu (Daśa-bhúmi)	„ „	such names as Dri-med- śel-gyi-sa; Hossérphro- va rig dsin-sprin-phuñ and Chhya-gya-gyurva- sa, &c.

In orthography, rhetoric and syntax there are many deviations (from the ordinary rules).

In doctrinal and meditative points the Bon are divided into heretic and orthodox Bon.

In some Bon books it is mentioned that in void beginningless eternity, there came to exist entity of eternity, from which grew “hoar-frost;” from hoar-frost grew dewdrops as big as peas, &c. Ultimately all

bodies and animals are said to have grown out of an egg. The Bonpo have borrowed their ideas of S'akti and Ísvara from the Tirthikas.¹¹ Accounts like the above regarding the growth of the world are also to be met with in all the Tantrik works of the Buddhists and the Bráhmans. The Bon work called "Du-pa rinpo chhe gyud" relates that all material things have no (absolute) existence. Their existence is relative to (our) wishes and desires. When attachment is withdrawn from them for the sake of attaining to a state of (mental) vacuity (*súnyatá* or *bonku*), they exist not. Both these (existences)¹² being comprehended, and at the same time not clung to, by the mind, it is said to have obtained Jñána of S'únyatá, the bright lustre of which, being devoid of anxiety and deliberation, encompasses all. This is the real object of meditation. Thus by effecting a union of Darśana and meditation, as its consequence, the attainment of emancipation is secured.

According to Chyan-ña lodoi Gyal-tshan, Kun-khan S'erhod and Tag-tshan Lochava, the ninth volume of the Bon Aphorisms is said to agree with the theories of the Dsog-Chhenpa class of the Níñma sect. In Bon works which they possess, it is stated, that the original basis—the purest nature which preceded both S'en (Buddha) and Sattvam (animal being)—is the clear bright *vacuity*, called the nature of Bonku (the Supreme ideal of the Bonpo). It is not covered by the gloom of ignorance and desires. Being nothing in itself, it has yet produced the consciousness of all. From the beginning existing in the essence of S'en (Buddha), it is not produced by the agency of Karma. Being unconnected with the consequence of actions, it is self-existent, existent without effort. Its perception by the mind does not improve it, nor does the ignorance of it affect it in any way. It equally exists in Buddha and Sattvam (animal being), without altering them for good or bad. This primeval Cause—the Bonku, which encompasses all, is the basis of all matter. All material and transmigrating existences (Sattvam) have emanated from it. All things are contained in it. Its action is diffused without obstruction. By well-regulated thinking, when it is perceived, the mind acquires Jñána (wisdom). But if it is not thought upon, *i. e.*, not perceived, the mind acquires Karma or the cause of sin. If its meaning (S'únyatá) is investigated, the real basis, the abode of time and space, is evident. To reflection and well-regulated thinking it is fully manifest. From its conception the three Bon images (ideals) are clearly seen, and then the soul is absorbed in the essence of "S'en." The clearest lustre (S'únyatá) which is identified with Bonku or with the basis of all existence when discerned, is found self-existent in its own essence which is the nature of

¹¹ The prefect of Di-guñ, named Jig-ten gonpo, observed that the Bonpo have erroneously adopted the principles of the Tirthikas.

¹² The relative and illusory existence of material things.

Buddhas¹³ and living beings ; yet being thus self-existent, on account of the want of discernment (true knowledge), its existence is screened by the gloom of Avidyá ; for example, though butter exists in milk, yet to the eye of the ignorant it does not. The Bonku, being perceived by the mind, becomes uncovered and manifest in all its parts. Thus the supreme nature of the basis, being uncovered and naked, is pre-eminently manifest, when the action of the mind, deliberation and effort, have nothing to do with it ; then rises up Jñána when the thinking power is obstructed, and remembrance ceases. The mind, having lost its functions, becomes passive and ceases to think. Its position then may be compared with the instantaneous bliss of the coitus of the sexes. The mind having ceased to form a conception of the Supreme cause, Bonku or S'únyatá stands like an image on the mirror.¹⁴ This glorious lustre is called the self-born Jñána of Vidyá ; the undivided attention towards it is called the Bon-Darśana. In the region of mind, called Chitta-rinchhen, which is immense and located on the eight petals of veins, there are the five lustres of appearance belonging to the five organs of the body. In the middle of these five lustres sits Bonku like a crystal ball, wrapped round by the thread of the five Jñánas. Its essence, being S'únyatá, is never perpetual ; nor, coming under the cognizance of Vidyá, is it subject to annihilation. That this invisible essence exists in this manner must be learned by meditation. Existing without cause and unseizable, it is pure in its nature.

MEDITATION.

In the fully enlightened state of mind, the continued and inseparable fixing of the mind on the Bonku is called the " Gom " or meditation. There are three kinds of " Gom."

1st, Thun-gom ; 2nd, Nañ-gom ; 3rd, Lón-gom.

Thun-gom is performed by one's being initiated into it by a spiritual guide, *i. e.*, Lama, by counting (of beads or names) and chanting of the virtues of Bonku. In the first stage of *gom*, the mind does not remain absorbed in the particular object of meditation. In the middle stage the absorption and distraction are equal. In the last stage the mind enters into complete abstraction. The perfect abstraction being brought under control, it can be suspended, put off and resumed, at pleasure. When the opportune time, the time of attaining sainthood, comes, this meditation (*gom*) reaches its limit.

2nd, Nañ-gom. At proper times, the mind gets filled with the light of Átma-mukti-jñána, and then passing into deep meditation (*yoga*) becomes fully abstracted and at last even devoid of meditation itself.

¹³ That is, Bon saints.

¹⁴ The mirror is here compared with the mind which is unconnected with the image.

When this state is attained, the limit of Nañ-gom is reached. This state may be compared with the calm and unruffled sea, the ideal of Supreme inaction.

3rd, Lón-gom. When, after acquiring all sorts of Vidyá and seeing the real object ("Don", meaning an object aimed at), the meditation is finished and the mind has ceased thinking of the attainment of the essence of S'únyatá, the time of Lón-gom begins. At this time all sins, wicked thoughts, &c. turn into Jñána, all visible and invisible matter enter the all-pure region of S'únyatá, or Bonku, when transmigratory and emancipated existence, good and evil, mental attachment and separation, &c. turn one and without difference. When by this most perfect kind of meditation the sublime state is attained, the Lón-gom is gained.

These theories and notions of the Bonpo bear a striking resemblance to those of the Dsóg-chhenpa sect of the Nínma school.

The following are the nine vehicles of the Bon religion called *Bon-Srañ*.

- | | | |
|------|--------------|--|
| 1st. | 1. Phwa-ßen. | } These four <i>yánas</i> are called the causative vehicles. |
| | 2. Nañ-ßen. | |
| | 3. Thul-ßen. | |
| | 4. Srid-ßen. | |
| 2nd. | 1. Ge-ñen. | } These four are called the resultant vehicles. |
| | 2. A'kar. | |
| | 3. Tañ-sruñ. | |
| | 4. Ye-ßen. | |

3rd. The last vehicle which contains the essence of all the above eight vehicles, is called the Khyadpar-chhenpoi Thegpa.

The Phwa-ßen contains three hundred and sixty questions and doubts and 84,000 proofs. The Nañ-ßen contains four Gyer-gom and 42 Tah-rag. Gyer-gom and Tah-rag are divisions of the meditative science of the Bonpo. The Thul-ßen teaches the working of miracles. The Srid-ßen treats of 360 modes of dying and funeral services, the four ways of disposing of the dead, and 81 methods of suppressing evil spirits.

The Ge-ñen treats of the aphorisms regarding the bodies, animal life and their growth and maturity.

The A'kar describes many mystic (Tantrik) demonstrations. In the Ye-ßen the various kinds of mental demonstration, and in the Khyad-par-chhenpoi the five classes of Upadeśa (instruction) are described.¹⁵

The Tañ-sruñ describes the kinds of *Bum*, i. e., the tombs for the deposition of relics.

The four Gyu Bon, or vehicles of effects, take away the four discriminations of remembrance and understanding. The study of A'kar and Ye-ßen refines the obfuscating defects of learning.

¹⁵ Besides the essence of the other eight vehicles, as previously mentioned.

The Khyadpar-chenpo can singly effect what the others can jointly do. Again the four Gyu Bon can secure the enjoyment of the four Bhú-mis (stages of perfection) of honourable action, for several ages. The Ge-nen and Tañ-sruñ, after carrying the Sattvam happily through three *Kalpas*, will take it to emancipation. The A'kar and Ye-sen can give it, after its first birth, freedom from existence. The Khyadpar-chenpo can secure to a person emancipation even in this life. (The author remarks:—although I could not obtain a work in which the rise and progress, theories and principles of the Bon religion are exhaustively described, yet I have written according to the account delivered to me by the sage of Diguñ respecting the earlier, mediæval and later Bonpo). Learned and erudite professors of the Bon religion, when it attained to prosperity, held a synod in the celebrated cavern of "Sañ-vai-Bon Phug" in the Mañkhar country. Priests and sages from India, Persia, China and Tibet assembled there. A compendious compilation of Bon "gomo" (or sūtras), about 84000 in number, was made, which is well known by the name of Sañ-ñag-dsoñ-thad ñi-hod-gyan.

Among the principal classes of Bon monasteries of Tibet the S'enderdñ monastery and the Yuñ-druñ monastery of Gyal-mo-roñ were most noted. In later times, by the command of the Emperor of China, most of these were pulled down by the Imperial armies and the Bon monasteries and religious establishments greatly devastated. On the site of the Yuñ-druñ Lhadñ monastery, a Gélugpa monastery called *Gakdan* was erected. An edict was issued forbidding all to follow the Bon doctrines, in spite of which many Bon priests and numerous monasteries still exist in Gyal-roñ, Tsho-kha and Koñpo and other places. The Gonparituo of Kham contains 500 priests. Formerly the Bonpo had no monastic system. Now after the example of the Buddhists they have monks and nuns, some of whom have pretensions to incarnate existence. But in general they are great drinkers of wine and eaters of meat. They are not careful to refrain from female company.

II.—DISPUTE BETWEEN A BUDDHIST AND A BONPO PRIEST FOR THE POSSESSION OF MOUNT KAILĀSA AND THE LAKE MĀNĀSA.¹

Je-tsun Melarepa with a great many pupils arrived at mount Tési (Kailāsa) from Pu rañ. There he was welcomed by a number of local deities. They made him profound salutations and large and curious offerings. Besides making him a gift of the lake Mapañ and mount Tési for the use of himself and his pupils as a hermitage, they undertook to protect his devotees and followers, after which they returned to their respective abodes.

When the teacher with his pupils arrived on the shores of the lake Mapañ to make religious obeisance and reverence, the Bon priest Naro-Bon-chhuñ and his sister, being informed of his fame and of his visit to Tési, came to meet him there. Knowing him, yet pretending not to recognise him, Naro thus accosted the teacher and his pupils:—"Whence are you and whither do you go"?

The venerable Je-tsun said—We are come from one of the mountains called La-chhyi (Laphye), in order to sit in meditation on the top of Tési.

Naro.—What is your name?

Je-tsun.—I am called Melarepa.

Naro.—Well then! the snowy Tési, the Lake Mapañ and yourself are alike. From a distance your fame is great, but on a near approach it is stript of its wonder. Admitting this mountain to be wonderful, I must say it is the possession of the Bonpo. If you wish to live here, you must practise Bon rites.

Je-tsun.—According to the Buddhist revelation this mountain is a place of pilgrimage for Buddhists in general, and more particularly by the prophecy of the sage Marpa it is destined to be the place of my hermitage. You must consider yourself fortunate to have owned it so long. If now you continue to reside here, you must follow the practices of our religion; otherwise you may go wherever you like.

Naro-Bon-chhuñ.—You two, though from a distance are of great fame, yet are little at a near view.² If you have something wonderful in you, come, let us compete with each other in the exhibition of miracles, so that whoever wins should own this place.

¹ Literally translated from a block-print said to be 800 years old.

² Lit. "at the bank," which is a Tibetan idiom, meaning "near."

So saying, Naro stood like a colossal figure over the lake, placing his legs on its opposite banks, and in metrical language thus spoke first to Kañkar Tesi :

Though great is thy fame,
Yet with snow thy head is clad.

Then to Mapañ-yu-tsho :—

Though great is thy name,
Being water, by water thou art crossed.

Lastly to Melarepa :—

Though great is thy fame,
Yet in old age half naked³ thou liest.
From thy mouth out pours a pretty song.
Thy hands an iron trident hold ;
Save this no wonders in thee lie.

Then in exclamation, to his gods :—

Thou unchangeable Bon-yuñ-tuñku Ye-sen,⁴
And thou legion of exalted gods !
Thou wrathful Tho-gyal, sucker of blood
With widely yawning mouth !
Thou nine-headed Vu-gupa
Who wielded twice nine arms,
And whose incarnation Gye-god is,
Thy head what prodigies holds !
Thy sister is Sriñ-gyalma.
I Bon-chhuñ am her devotee.

Then looking defiantly towards Je-tsun :—

Miracles—if shewn, should be shewn like this.

Hearing this challenge, Je-tsun sat himself down, covering the lake Mapañ. Lo ! it was a curious sight. The lake did not contract, nor did Je-tsun enlarge his body, yet each exactly-fitted on the other.

He then sang this Hymn—

Ho ! Ho ! Demon come and hear !
On the top of the Vulture-peaked hill,⁵
On the exalted throne—by eight lions borne,
The Victor S'ákya Thuba sits ;
Matchless and one with him in wisdom,
In the mansion of Virtue, called Hogmin,

³ Referring to his Indian ascetic dress.

⁴ The ideal image of the Bonpo.

⁵ Gridhrakūṭa Parvata on which S'ákya Siṃha used to sit in yoga.

The great sixth Buddha Dorje-Chhañ⁶ presides,
 In spirit with the Divine Mother united.
 In the sages Tilo and Naropa he became incarnate.
 The latter, who kept the door of S'ri Nalendra,
 And the Lochava Sañgye-Marpa,—
 These I ask for benediction.

I, famed far and wide,
 To carry out the word of Marpa of Lha-brag,
 Have come to Tesi to meditate,
 For my own and others' good.
 And now, O heretical Bonpo, comest thou ?
 Let me retort on thee with a repartee !
 Kañkar Tesi of great fame,
 Whose crest with snow is white,—
 So white is Buddha's faith.
 Mapañ, the famed lake of Turquoise,
 Whose water over water runs,—
 So all matter in vacuity is lost.
 I, Melarepa of great fame,
 An old man who naked lies,
 Am sprung from Wisdom and Remembrance.⁷
 My lips sing a little song,
 For all Nature at which I look
 Serves me for a book.
 The iron staff that my hands hold,
 Guides me across the ocean of migratory life.
 I rule over mind and light.
 For prodigies and miracles to shew
 I depend not on earthly gods.
 Tesi, the Prince of the World's Mounts,
 To Buddhists in general possession yields,
 And to Melarepa chiefly and his votaries.
 Ye heretical Bonpo be useful and good,
 Come and embrace the sacred Dharma !
 If you do not,—vanquished by miracles,
 Go hence to other and distant lands !
 Beware of such prodigies in future !

He then held lake Mapañ on the tip of his thumb.

⁶ This is the chief Buddha or Dharmakāya of the Gelugpa school.

⁷ That is, the virtue of remembrance of former Buddhas.

Naro Bon-chhuä.—This time your miracle appeared somewhat wonderful. As I arrived here prior to you, allow me to remain along with you. Let us try a second feat in showing miracles to see who wins!

• *Je-tsun.*—I cannot condescend to exhibit religious miracles in rivalry with a juggling enemy; if you cannot adopt my religion, better remove yourself elsewhere.

Naro.—I cannot cast off the faith of Yuñ-druñ from my mind. If in exhibiting miracles you can defeat me, I shall out of my own accord go away. But you cannot use force against me; for to kill me or to beat me, is against your vows of religion. By no other means can you drive me out. Come, therefore, let us try another feat!

He then advanced to make Bon-kor, *i. e.*, to go round the sacred peak of Tesi from right to left. On the other hand, Je-tsun performed the "Chho-kor," *i. e.*, circumambulated from left to right according to the Buddhist method. Coming thus from opposite directions, the parties met together near a huge rock called Phapoñ, situated in the north-eastern Jón of the country.

Naro.—Your circumambulation is well done, now let us once more do the same according to the Bon fashion!

So saying and catching Je-tsun's hands, he attempted to draw him towards his own way.

Je-tsun.—Even if I move in the wrong way, I shall not betake myself to the contrary faith or religion. But (added he) do you now follow our religion!

When they were pulling one another by the arm, each to bring the other to his way and creed, their foot-marks remained imprinted on the top of the rock Phapong. At last by the force of holiness, Je-tsun succeeded in drawing the Bonpo towards his own way of circumambulation. When arrived at the northern back of Tesi, Naro said,—“from behind this let us make the Bon-kor”.

Je-tsun.—If you can.

Naro.—This time you may have appeared great, but let us once again wrestle!

So saying, he hurled a piece of rock of the size of a yak, towards Phapoñ. Je-tsun also at the same time threw one twice as large as Naro's.

Naro.—This time you have won, but one or two winnings are no test at all. Come let us try again!

Je-tsun.—If the sun, moon and the stars all combine to throw lustre, yet the sun and moon can alone dispel the gloom of the world, so if you and I wrestle together, you cannot be equal to me. Tesi therefore has passed

under my sway. I am victorious. For your satisfaction and also in order that all men may see the superior might of Dharma, you may try another feat. Je-tsun therefore sat on the cavern called Padma-Phug,⁸ on the western Jón of Tesi. When the Bonpo reached the eastern side, Je-tsun from the west, stretching his legs, trod on the cell of the Bonpo, where he left a foot-mark, and said,—“if you can do the like, come and do it.” Naro attempted from the east to reach it with his leg by stretching it to the west, but it did not go half the way. Seeing this, the Asuras (Demons) from the skies broke into loud laughter. The Bonpo, who was a little ashamed, again wanted to try another feat and advanced to perform the Bon-kor. Je-tsun himself having proceeded with his Chho-kor, they met to the south of Tesi, when a heavy shower of rain fell. At this, Je-tsun, wanting a place of shelter, asked him whether he could construct the walls or the superstructure of the house, which he meant to erect for shelter.

Naro.—I shall undertake to construct the roof.

Je-tsun now commanded the Phapoñ to come to the spot and leave a portion of his body to serve him as a wall. Phapoñ consented, and lo ! there was erected a huge fabric without a roof. Naro-Bon-chhuñ several times attempted to put a stone roof over the wall, but every time he failed.

* * * *

Naro.—You call me a juggler, but it is you who every time I have seen play the part of a juggler. I am not satisfied with these your miracles. Both you and I, on the 15th of this month, shall run a race up to the top of Tesi. Be it settled that whichever of us shall reach the top of Kañ-Tesi quicker, will get possession of it. It will then be seen which of us possesses the chief perfection.

Je-tsun agreed to the proposal, but remarked,—“what pity ! you mistake the light of Bon-bum for the chief perfection. He who possesses it should be able to see his own face. In order to be able to do so, one must embrace the system of meditation prescribed in our religion”.

Naro.—What good and evil lie in your mind and in mine, what the difference is between the Bon and Buddhist religions, whether your previous prodigies are mere illusions or proceed from propitiation,—I cannot make out. Now let us be sure of seeing which of us can be on the top of Tesi earlier.

The proposal was accepted by Je-tsun. In the meantime Naro-Bon-chhuñ diligently offered prayer to his tutelary deity, while Je-tsun steadily applied himself to the exercise of his ascetic rites.

⁸ Lotus Cavern.

At the dawn of the 15th, Naro-Bon-chhuñ being dressed in a blue fur-dress, playing the cymbal, called "*shang*", and mounting a tambourine, went towards the sky. The pupils of Je-tsun, seeing this, went to him and found him fast asleep. One of the pupils named Re-chhuñ addressed him:—"Venerable Sir! Naro-Bon-chhuñ, early in the morning, riding his own tambourine, flew towards the sky. By this time he has reached the waist of Tesi." Je tsun being still in bed, his pupil thought that the Bonpo had gained the day and carried off the possession of the place. Earnestly he pressed Je-tsun to get up, and the same was done by all the pupils. Je-tsun now looked with fixed eyes towards Tesi and said—"behold! the Bonpo, being unable to climb the precipice, has gone round it." Then in a finger's snapping he mounted the sun-beam and, by spreading his raiment as outspread wings, flew towards the top of Tesi, which he reached in a moment along with the glowing sun. At this time the Lamas belonging to Je-tsun's order and the god Chakra Sambara witnessed the spectacle, and were delighted with the triumph of Je-tsun. When Naro-Bon-chhuñ was attempting to rise above the neck of Tesi, he fell down, and his tambourine rolled down towards the southern valley of Tesi.

III.—PART I.—EARLY HISTORY OF TIBET¹.

(Introduction.)

Prior to the advent of S'ákya Simha,² during the war between the five Páṇḍavas and the twelve legions³ of Kaurava armies, one of the warrior princes, named Rúpati⁴, through dread of war, fled towards the snowy country of Tibet. For fear of being pursued by the enemy or by his suzerain, the chief of the Kauravas, for deserting the field, he dressed himself in female attire, and with only one thousand followers took shelter

¹ The following account of Tibetan history is obtained from original sources. I have consulted Debther-ñon-po, Chho juñ by Bú-ton, Gu-nag-gi-tsi, and the original ancient records of Tibet called Ñon-gyi-yig-tshuñ-ñiñ-pa, &c., &c. The preparation of a complete history of Tibet from the earliest period to the present date for which I am at present engaged in collecting materials is under contemplation.

² སྐུ་ལྷ་མེད་.

³ Indian legions amounting to one Akshauhini or Tibetan Puñ-tahog.

⁴ རུཔ་པུ་.

in Tibet. He found the country, *Púgyal*, (for such was the ancient name of Tibet, which in later times was converted into Bod,⁵) widely peopled by a race of men, still in a primitive state. They welcomed him as their king. By his mild and peaceful behaviour he won their affection and ruled over them for many years. Under his and his descendants' rule the people multiplied, enjoyed prosperity and developed the arts. From Rúpati to the foundation of monarchy in Tibet by Ñah-Thi⁶sanpo, in the beginning of the fourth century before the birth of Christ, the history of Tibet is very obscure. During this long interval, after the fall of the house of Rúpati, the country was partitioned into several petty states, ruled by insignificant native chieftains and princes. Of this uninteresting period scarcely any reliable record, traditional or legendary, is extant, sufficient to throw any light on the earliest history of Tibet. Among the ancient records, the Debther-Ñonpo⁷ and the Chho Juñ⁸ are by far the most correct. Their authors appear to have been less influenced by love of the marvellous, or the appetite for wonders, which marks all early oriental writings, and to have collected their materials in an exemplary spirit of sober investigation. The Debther-Ñonpo and the Chho Juñ are therefore unique and rare ancient historical records of Tibet. According to them, the country was peopled at the same time as India, in the beginning of the present Kalpa, a fact accepted by most modern native historians. The Gyal-rab or royal pedigree, written by the fifth Gyalwa-Rinpoche, and Mani Khabúm, one of the oldest legendary works, ascribed to king Sroñ-tsan-gampo, besides other works of historical fiction, give altogether a different and fabulous account of the origin of the Tibetans. In the sacred books of Kálachakra,⁹ Manjuśrí mûla tantra,¹⁰ and Ashṭa-sáhasrika,¹¹ Buddha foretold that his religion would be widely diffused in the snowy country of the north, where many Saints would also appear.

⁵ The Tibetan *b* when unaccompanied by any other letter is pronounced like *p* slightly aspirated, and the final *ʔ* in Tibetan is always mute. Therefore Bod or བོད་ is pronounced as Po or Pu of Pu gyal.

⁶ གནའ་མི་སྐུ་པོ་

⁷ རྒྱལ་པོ་ལྷ་པོ་

⁸ ཆོས་འབྱུང་ Chhos-ābyuñ; in Tibetan *by* when preceded by *h* is pronounced as *j*.

⁹ རྒྱལ་པོ་ ¹⁰ གཏམ་དཔལ་མ་རྒྱུད་ ¹¹ བཅོམ་ཉིད་པ་

CHAPTER I.

MONARCHY (416 B. C. to 617 A. D.)

(Bon Period.)

Four hundred and seventeen years, according to Búton's¹² chronology, after the nirváṇa of Buddha, in the year 416 B. C., was born in India, Nāli-Thi-tsanpo¹³ the first of the Tibetan kings who established universal sway over Tibet. The fifth son of king Prasenajit of Kosala¹⁴ was born with obliquely drawn eyes and light blue eyebrows of the colour of turquoise. As soon as he came out of his mother's womb, the infant was found possessed of webbed fingers and two rows of teeth, fully developed, and white as a conch shell. Apprehending great evil from such ominous signs in the infant, the parents packed it up in a copper vessel and floated it away on the river Gangá. A farmer finding it, carried it to his wife who nursed it. Being a simple-hearted man, he did not try to pass off the child as his own, but revealed the truth; and the strange story of the forlorn royal child became known to all. Informed of the antecedents of his life, how he had been thrown into the Gangá by his royal parents and nursed by the good farmer's wife, the youth's mind was overcast with sorrow and thoughtfulness. Being born a prince, he could not bend his mind to apply itself to the lowly pursuits of a farmer's life. After passing many a day in anxiety and melancholy, he quitted the farmer's house, bidding his country a mournful farewell, with a firm determination either to reign as a king or not live at all. He proceeded northward to the Hímálaya mountains subsisting on wild fruit. Unmindful of the difficulties of a mountain journey or of death, he travelled further and further north, till by the blessing of Árya Chenressig he arrived at the summit of the Lhari¹⁵ snowy mountains of Tibet and surveyed the surrounding regions. His heart was

¹² The great Tibetan author Búton was born at Tho-phug in the year 1290 A. D. He became the abbot of the Shálu monastery near Tasilhunpo. He was the first great Tibetan scholar who compiled the two well-known Encyclopædias of the Buddhist scriptures, called Kah-gyur and Tan-gyur, which were formerly scattered in detached pieces among different monasteries. He wrote the great critical chronological work, called Khapa-kah-chad, which is followed by the Gelugpa writers, and composed 40 volumes in different branches of sacred literature, astrology, medicine and history.

¹³ This famous monarch is said to have been sent to India to be born in a royal family of undefiled race in order to spread Buddhism in Tibet. The spirit of Chen-re-sag entered into him to make him one of the dynasty of Prasenajit.

¹⁴ ཇུ་ལྷ་མོ་ཐུག་པ་ Kasala rgyal, i. e., King of Kasala.

¹⁵ བུ་ལྷ་མོ་ཐུག་པ་ or བུ་ལྷ་མོ་ of Bod.

delighted on descrying land on the north, and gradually descending as it were from heaven, down the slopes, he arrived at Tsan-thaṅ,¹⁶ a great plateau with four passages on its four sides. Here he was met by many natives, who, struck with the graceful looks of the stranger, asked him respectfully, who he was, and where he came from. He replied to them by signs (for he knew not their language) that he was a prince, and pointing his finger towards the top of Lhari, he showed the direction he had come from. The Tibetans, who were sure they had seen him come from the direction of heaven, took him for a god who had descended from the celestial regions. Prostrating themselves before him, they entreated him to be their king, an offer which he gladly accepted. Then placing him on a chair, they carried him in solemn procession to the central country. From being borne on the back of men, seated on a chair, he was called by the name of Ṇaḥ-Thi-tsanpo¹⁷. He erected the great palace of Yumbu Lagaṅ,¹⁸ on the site of which Lhasa was built in later days. He married a Tibetan lady named Nam Mug-mug,¹⁹ who, says the legend, was a fairy. After a long and prosperous reign of many years, which was marked by the dispensation of wise and impartial justice, the king died, leaving the throne to his son Mug-Thi-tsanpo.²⁰ The first seven kings, counting from Ṇaḥ-Thi-tsanpo, are well known by the designation of Namgyi-Thi²¹. Di-gúm-tsanpo, the eighth in descent from Ṇaḥ-Thi, was married to Lu-tsan-mer-cham,²² by whom he had three sons. His minister, named Lo-ṅam, was a very ambitious man, who rebelled against him. An internecine war followed in which the king was killed.

It was during this war that the use of the coat of mail (khrab) was first introduced into Tibet from Már-Kháin.²³ The victorious minister, having married one of the widows of the late king, usurped the throne and obliged the three princes to fly towards Koṅ-po. He reigned for several years. The widow of the late king and mother of the three princes, by invoking the goblin Yar-lha-sampo, got a son, who eventually rising to the post of

¹⁶ བརྩན་ཐང་ in the Province of dUs.

¹⁷ ḡṆaḥ, back; khri, chair; ḡtsanpo, king (chair-borne king). See Note 6 on p. 212.

ḡTsanpo (བརྩན་པོ) is a purely ancient Tibetan word meaning the powerful. ḡtsan means a spirit, and po is the substantive particle which also partakes of the nature of a definite article.

¹⁸ ཡུམ་བུ་སྤ་གང་

¹⁹ བཀའ་མ་ལུ་ལུ་

²⁰ ལུ་མུ་ཁྱི་བརྩན་པོ་

²¹ ḡNam = heaven, gyi = of, Khri = throne; hence celestial throne.

²² ལུ་བརྩན་མེར་ལུ་

²³ A province of Kham on the north-west of U (dUs).

minister killed the usurper. He now invited the three exiled princes from Koñ-po, the eldest of whom named Chya-Thi-tsanpo²⁴ quietly ascended his ancestral throne. Chya-Thi-gyal was married to Bom-thañ. During his reign the Bon religion spread largely over Tibet. Mug-Thi-tsanpo, marrying Sá-diñ-diñ, begat Diñ-Thi-tsanpo, whose son, by his queen Sa-thám-thám was king So-Thi-tsanpo. So-Thi-tsanpo was married to Dog-mer-mer by whom he got Mer-Thi-tsanpo, who by his wife Dag-Kyi Lhamo Karmo had a son Dag-Thi-tsanpo. This king married Srib-Kyi-Lhamo, of whom was born Srib-Thi-tsanpo. These kings are said to have ascended to the skies, being carried there by their queens who were celestial beings, in consequence of which their mortal relics were not left below. The ancient Tibetans while giving an Aryan origin to their first sovereigns, did not fail to show greater regard for their country by giving their princess an altogether divine origin. Srib-thi-tsanpo married Sa-tsan-luñ-je, who gave birth to the celebrated king Di-gum-tsanpo, under whom the Bon religion became greatly diffused in Tibet. Both he and his father are well known in Tibet by the title of Parkyi-diñ.²⁵ The names of all these kings, it is worthy of remark, were formed by a combination of the names of their parents, the mother's name generally preceding that of the father. Bom-thañ gave birth to king Esholeg whose son, by Mu-cham Bramana, was king Desholeg. Desho married Lu-man-mermo who gave birth to Thisholeg, who again by his Queen Tsan-mo-gur-man had a son Guru-leg. Guru married Tsho-mandoñ who gave birth to Doñ-shi-leg, who married Man-pumo and by her had a son Isholeg whose son by Mú-chain was Ssa nam-Ssin-de. The six succeeding kings were designated by the title of Sái-leg, meaning the excellent of the land. Ssanam Ssin-de married the fairy Tsho-man-thi-kar of whom De-Phrul-Nam-Shuñ Tsan was born. This prince was married to Se Ñan mañma who gave birth to Se-Nol-De, whose son by Lu mo-mer-ma was SeNol-po De, who again by Mo-tsho begat De Nol-Nam. This last prince married Thi-Man-Jema who gave birth to De Nolpo, who again by his wife Se tsun-Ñan Je had a son De Gyalpo. De Gyalpo was married to Man-tsun-lúg-goñ who gave birth to De-tin-tsan, who married to Ñi-tsun-mañ ma-Je begat Tori Loñ-tsan. This succession of eight kings who followed the Sái-leg (ས་ཡུ་ལྷན་པོ་) were

²⁴ བཅོམ་པ་རྒྱལ་པོ་ It is to be borne in mind that the ancient Tibetan word བཅོམ་པ་ is now obsolete being replaced by the word rgyal (རྒྱལ་), meaning Victor and equivalent to Sanskrit Rájá.

²⁵ བར་ཁྱིམ་པོ་ i. e., The soarer of the middle region.

distinguished by the surname Dé. All the queens of the above monarchs were believed to be superhuman beings, such as fairies and sirens, who for enjoyment of earthly pleasures had assumed human forms. They were believed to have gone to heaven with their bodies, taking their husbands with them.

In fact those princesses were not chosen from Tibetan subjects but from the families of the independent sovereign princes of the border countries. In Tibet a princess is called *Lhamo* or goddess. The queens who came next in succession were generally taken from among the subjects, and were therefore of human origin. It was in the 27th generation of the royal succession that the Bon religion rose to the zenith of its power, and when the sun of Buddhism was shining in its meridian lustre all over Jambudvīpa (says the Debther Ņonpo), snow-girdled Tibet remained buried in the impenetrable darkness of Bon mysticism. King *Tori* was married to *Din tsun Chyañ-ma* who gave birth to *Sú-Thi-tsan* who being married to the Princess of *Mán* named *Thi-Kar* begot *Thi-da-Pún-tsan*. This last prince also married a Princess of lower Kham named *Lú teñ* by whom he got *Thi-thog Jetsan*. All these princes are said to have been peculiarly favoured by *Chenressig*, though Buddhism was as yet unknown in Tibet. All these five kings were known under the title of *Tsan*.

In the year 441 A. D.²⁶ was born the famous Tibetan king *Lha-thothori Ņan-tsan*, believed to be the incarnation of *Kuntu Ssañpo*.²⁷ He ascended the throne in the 21st year of his age. When he reached the 80th year of his age, in the year 521 A. D., there fell from heaven on the top of the great palace of *Yumbu Lagañ* a precious chest, which when opened was found to contain the following objects:

- (1.) *Dode-Ssamatog* (*Sútránta Piṭaka*).
- (2.) *Ser-kyi-Chhorten* (a golden miniature shrine).
- (3.) *Pañ-koñ Chhyagya-Chhon po* (a sacred treatise on palmistry and mysticism).
- (4.) *Chintamani Norpo* and *Phorpa* (a *Chintamani* gem and cup).

Being the first prince who was favoured by heaven with the precious gift of the sacred treasures, *Lha-thothori* has been deified by the Tibetans. As the king, sitting in council with his ministers, was debating on the value and merit of the divine gift, there was heard a voice from heaven,

²⁶ Various authors give different dates regarding the birth of this monarch. The chronology adopted by me tallies with facts. *Ņan-tsan* was his real name, *Lha thothori* was the name of the place where he was born. In Tibet all great personages are called after the name of their birth places; for instance the great reformer of Tibet *Lo-Ssañ tag-pa* is called *TsoñKhapa* from *TsoñKha* his native place. *Tsoñ* means onion, *Kha* a bank.

²⁷ *Kuntu Ssañ-po* is also the name of the supreme god of the Bon religion.

saying that in the fifth generation the meaning of the contents should be revealed. The king, therefore, carefully preserved them in his palace and under the name of Sañ-wa Ñanpo daily offered oblations to them. In consequence of such a rare instance of good fortune, the king retained his youthful vigour even at the advanced age of fourscore and ten. He died in the year 561 A. D. at the age of 120, after a prosperous reign of fully a century. He too bore the appellation of Tsan to his name like his five predecessors. King Lha-thothori married the Princess No-Ssa-mañ-po-Je of whom king Thi-Nan-Ssañ-tsan was born. The latter married the Princess of Broñ of whom Bro-Ñan-Dehu was born. Bro-Ñan was married to the princess of Chlin named Lu-gyal who gave birth to a blind child.

This son of Bro Ñan Dehu was disqualified from ascending the throne on account of his blindness. As there was no other heir, nor any possibility of the queen giving birth to a second son, the blind boy after a short interregnum was placed on the throne. At his coronation, the sacred treasures called Ñanpo Sañwa were worshipped, by virtue of which the blind king regained his sight. The first object that he saw being a Ñan (or wild sheep) running on the Tagri hill near Lhasa, he was given the name of Tagri Ñan Ssig (the seer of ovis ammon on the Tagri hills). He married Hol-goñ Ssañ, and was succeeded by his son Nam-ri-Sroñ-tsan. It was during the reign of this king, that the Tibetans got their first knowledge of arithmetic and medicine from China. The prosperity and the cattle-wealth of the country was so great during this period that the king built his palace with cement moistened with the milk of the cow and the yak. Once riding his fiery and quick-footed steed, named Dovañ-Chañ, which he had obtained from the banks of lake Bragsum Dīnma (a small lake north of Lhasa, not more than 20 miles round), he arrived at the northern desert plain where he slew a fierce Doñ (wild yak) with terrible horns called Thal-Kar-ro-riñ. Then, while riding fast, the carcass of the yak, which he had bound with the straps of his saddle, fell down on the ground. In order to take it up, the king alighted from his horse, when he found himself on an extensive salt bank. This was the inexhaustible mine called Chyañ-gi-tshva²⁸ which still supplies the greater portion of Tibet with salt. Before the discovery of this salt mine, there was a very scanty supply of salt in Tibet. The king married Bri-thoñ-Kar, the princess of Tshe-Poñ, by whom he got his only son. The powerful Namri-Sroñ-tsan died in the year 630 A. D., leaving the throne to his son, the illustrious Sroñ-tsan Gampo, with whom opens a new era in the History of Tibet.

CHAPTER II.

MONARCHY (600 A. D.—780 A. D.) .

(Buddhist period.)

Sroñ-tsan-Gampo was born A. D. 600-617.²⁹ On the crown of his head there was an excrescence believed to be a symbolic representation of Buddha Amitábha. Although it was very bright and full of lustre, yet he used to cover it with a red satin head-band. At the age of thirteen he ascended the throne. During this period were discovered, in certain caverns of rocks and recesses of mountains, many self-created images of Chenré-ssig,³⁰ the divine mother Tárá, Hayagríva and other gods, besides many inscriptions including the six mystic syllables “Om-mani-padme-hum.”

The king visited these images and made oblations to them with his own hands. With the help of his subjects he built a lofty nine-storied palace on the top of the hill, where Potálá now stands built out of its ruins. He had immense armies, besides innumerable reserve troops of spirits over whom by force of his charms he had great command. The fame of the wisdom and martial valour of this double-headed prince, as he was called from the excrescence over his head, reached the border countries, whose sovereigns sent ambassadors to his court with letters and rich presents. He returned their kindness in a way that was most becoming in a sovereign of his rank. While yet very young, Sroñ-tsan Gampo evinced great intelligence and sagacity in dealing with his dependent princes and improving friendship with independent potentates. Although there was no such thing as a written language in Tibet, even at so late a period as this, yet Sroñ-tsan managed to communicate with the foreign kings in their own languages. He had learnt many of the border languages, which helped him in conducting conversation with the Indian and Chinese ambassadors. He acquired a fair knowledge of the Sanskrit, Palpa (Newari) and Chinese. These rare qualifications, and especially his inclination towards Buddhism, made people believe him to be an incarnation of some divinity. He extended his conquests to the surrounding countries, and brought the neighbouring princes under subjection. As soon as he got clear of all military difficulties, he devoted his attention to the propagation of Buddhism in Tibet. He clearly saw that a written language was most essential to the establishment of religion, and more particularly to the institution of laws for the good of the people, and that as long as this all important want

²⁹ Tibetan historians do not agree in their accounts of the exact date of this sovereign's birth, but their dates range between 600 to 617 A. D. He is the avowed incarnation of Chen-re-ssig.

³⁰ ཡུཾ་ཨྱ་མུ་ཐཱ་ཤཱ་ཡ་ sryan-ras gSaigs or Avalokiteśvara.

remained unsupplied, no success in either could be ensured. He, therefore, sent Sambhoṭa, son of Anu, with sixteen companions, to study carefully the Sanskrit language and thereby obtain access to the sacred literature of the Indian Buddhists. He also instructed them to devise means for the invention of a written language for Tibet by adapting the Sanskrit alphabet to the phonetic peculiarities of the Tibetan dialect. He furnished the members of the mission with a large quantity of gold to make presents to their Indian professors. They safely reached their destination in Aryāvarta, where, under the Buddhist sage Livikara, Sambhoṭa acquired a thorough knowledge of the Sanskrit and of sixty-four different characters known in the Arya land. Under Pandit Devavid Simba they learnt the Kalāpa, Chandra and Sārasvata grammars of the Sanskrit language. They also mastered the twenty-one treatises of aphorisms and mysticism of the Buddhist creed. After returning to Tibet, they propitiated Manjuśrī the god of learning, and framed the system of Tibetan characters, *viz.*, the U-chan or “letters provided with heads” (mātras) adapted from the Devanāgarī, and the U-me or “headless” from the Wartu, and thus introduced a copious system of written language into Tibet. They composed the great grammatical work called SumChu dag-yig. The king ordered the intelligent class of people to be taught the art of reading and writing, and many Sanskrit Buddhist books to be translated into Tibetan, and thus he laid the foundation of Buddhism in Tibet. He then required all his subjects by royal edicts, to observe the ten virtues besides the following sixteen moral virtues:

- (1.) To have faith in KonChhog (god) (རྟོན་མཚན་ལྷ་མོ་).
- (2.) The performance of religious observances and study.
- (3.) To honour one's parents.
- (4.) To respect the meritorious and to promote the talented.
- (5.) To honour the elders as well as those who are of high birth, &c.
- (6.) To pay attention to relatives and friends.
- (7.) To be patriotic and useful to one's own country.
- (8.) To be honest and upright.
- (9.) To know the good use of food and wealth.
- (10.) To follow the example of the good.
- (11.) To be grateful and return the kindness of benefactors.
- (12.) To use just weights and measures.
- (13.) To be free from jealousy by establishing concord and harmony with all.
- (14.) Not to listen to the words of women.
- (15.) To be gentle and polite in speech and acquire skill in conversation.
- (16.) To bear sufferings and distress with patience and meekness.

By inculcating these sixteen moral virtues, he greatly promoted the present and future well-being and happiness of his subjects. From the seashore of southern India he procured for himself a self-created image of Chenressig with eleven faces made of Nāga-sāra sandal wood. He married a Nepālī Princess, the daughter of Jyoti-Varma king of Nepāl, who brought him seven precious dowers, the images of Akshobhya and Maitreya and a sandal-image of Tārā, the gem named Ratnadeva, a mendicant's platter made of lapis-lazuli or Vaidūrya. Then, hearing the report of the extraordinary beauty of the Princess Huñ-shiñ Kuñ-jú the daughter of Seṅgé-tsanpo or the Lion King (Chinese Thai-Tsung³¹) of China, he sent his celebrated Prime Minister Gar with a hundred officers to China. After repeated negotiations the proposal was agreed to. Many stories are recorded in connection with this marriage of which I here give one. As the number of candidates for the princess's hand was very great, the king, unable to decide whom to choose or whom to reject, at last declared that he should bestow the princess on that prince whose minister by dint of sharpness of sense and quickness of understanding would stand first in merit and intelligence. In the first ordeal, the king laid before the assembled ministers a buckler constructed of a coil of turquoise, with one end terminating in the centre and the other at the edge. He required them to pass a string through the aperture of the coil from one end to the other. It was a great puzzle to all except to the shrewd Tibetan minister Gar, who tying one end of a thread to the narrow waist of a queen ant, gently blew it forward through the coil. The ant, dragging the thread easily, came out at the other end to the great wonder of all. The king, not liking to send his favourite daughter to such a distant and barbarous country as Tibet, devised repeated trials in all of which the cunning minister acquitted himself well. The reluctance of the king was at last overcome by various contrivances, and he at last determined to decide the fate of his daughter finally. He ordered 500 handsome girls of the princess's age to be dressed in the same kind of apparel as his daughter, and exhibited them before the assembled ambassadors along with the princess herself. The shrewd Tibetan, never wanting in resources, had studied the countenance of the princess; moreover being secretly informed of the king's design, he had taken some hints about the identification of the princess from an old nurse in the royal household. By these means, the Minister Gar at once recognized the real princess, and gently pulling the edge of her robe, he claimed her for his liege lord. The

³¹ King Thai-Tsung one of the most illustrious sovereigns of China, was the son of Lyyeen the founder of the Tang dynasty of China A. D. 622. Thai-Tsung ascended the throne abdicated by his father in his favour in the year 626, when Sroñ-tsan was reigning on the throne of (Yum-bu Lagañ) Tibet.

trials ended here. When it was fully settled that the princess should go to Tibet, she addressed the king, "Sire, as it has pleased your Imperial Majesty to send me to Bod, a country where there is no religion, I pray that you will allow me to take with me the great image of Buddha, and several volumes of Buddhist scriptures, besides a few treatises on medicine and astrology." The king accordingly granted her prayer and gave them as parts of her dowry. Hearing that Tibet was a very poor country, he sent with the princess heaps of gold and silver for her use in Tibet. The union of the incarnation of Chenressig in Sroñ-tsan, and of the two incarnations of the divine mothers (Tará) in the persons of the two princesses produced great joy and happiness in the palace of Yumbu-lagañ. The two princesses, come from two great centres of Buddhism, *viz.*, China and Nepál, jointly exerted their influence for the propagation of Buddhism. First of all they converted the king whose inclination to it was so remarkably manifested in his adopting the moral tenets obtained by Thon-mi Sambhoṭa from India. The country of Tibet being situated in the centre of the four great continents, like the heaving breast of a Srin-mo,³² the king thought of making it the fountain of religion by filling it with monasteries. He erected one hundred and eight temples—four in the suburbs of his capital, four in its centre, four at the four corners of his kingdom, and so on. At the age of twenty-three he erected the two great temples called Rimochhe and Lhasa Prul nañ ki Tsug-la khañ³³ and dedicated them to the two images of Akshobhya and S'ákya respectively. Thus in the year 639 A. D. king Sroñ-tsan Gampo founded Lhasa the renowned capital of Tibet. The hill called Chagpori being considered as the heart of the country, the king erected his new palace upon it. At the age of twenty-five he sent his ministers to North China to erect 108 chapels at Re-vo-tse-ñu, the chosen residence of Manjuśrī towards the north of Pekin. He invited the great Pandits Kusara and S'ankara Bráhmaṇya from India, Pandit Sila Manju from Nepál, and Hwa-Shañ Mahá-tshe from China, Sambhoṭa, Lha-luñ dorje pal and other translators, for the great work of translation of the Buddhist scriptures from the Sanskrit and Chinese originals, in the newly formed written language of Tibet. The king had no children by the two princesses, in consequence of which he was obliged to marry two more princesses from Ru-yoñ and Moñ, named Je-Thi kar and Thi-Cham. The latter gave birth to a prince named Guñ-ri-guñ-tsan, and the former to Mañ-Sroñ Mañ-tsan. When Guñri reached the thirteenth year of his age, the king abdicating the throne in his favour, retired into solitude to pass his days in meditation, but unfortunately the prince died at the age of eighteen when

³² Amazonian woman.

³³ ལྷ་ས་གནས་ལྷ་ཁང་ Lhasa the temple of gods from which the capital of Tibet derived its name Lhasa, and གཅུང་ལྷ་ཁང་ Tsuglag-Khañ is Kuṭágara or a shrine.

Sroñ-tsan was obliged to resume royalty. This latter period of his reign he signalized by his devotion to Buddhism. He constructed many religious edifices and sacred images, and organized a regular service by translating books on rites and ceremonies. At an advanced age he passed away from this world to be absorbed, says the Tibetan historian, in the Dharma Káya (spirit) of the merciful Chen-re-ssig. His two beloved wives, the princesses of China and Nepál, who had strenuously supported him in the cause of religion, also left this worldly existence at the same time to accompany him to Tushita the abode of joy. During the reign of this celebrated monarch there was no such institution as that of an ordained priesthood. History is not clear about it. Notwithstanding this, he succeeded in instructing his subjects in the ritualism of Hayagríva, S'in-Je-S'e-(Yama). He concealed his will together with precious treasures for the use of remote posterity. He was a second time succeeded by his son Mañ-sroñ-mañ-tsan. Shortly after his son's accession the king of China, hearing that the incarnate monarch of Tibet was dead, sent a large army to invade Tibet. The Chinese soldiers were defeated by the Tibetans near Lhasa. With a view to take revenge on the Chinese king, the young king of Tibet assembled one hundred thousand Tibetan soldiers and sent them to invade China under the command of the veteran General Gar. In this audacious attempt the Tibetans were repulsed, and the old General perished in fight. Afterwards an immense Chinese army rushed upon Tibet with great uproar; in consequence of which the Tibetans were struck with panic. They concealed the gold image of S'ákya, brought by the Chinese princess, in the southern niches of the great temple near the gate called Meloñchan, and deserted Lhasa. Soon after, the Chinese army occupied the city and demolished the palace of Yumbu lagañ by setting it on fire. They succeeded in carrying Akshobhya's image to some distance, but on account of its unwieldiness they left it behind after a morning's march. King Mañ-sroñ died at the early age of 27. He was succeeded by his son Du-Sroñ-mañpo who was young when placed on the vacant throne. The reign of this king was made remarkable by the appearance of seven heroes.³⁴

³⁴ (1) rNog-riñla-nagpo raised a young elephant by its head.

(2) rNog-liñ-gam carried a yak on his back.

(3) (4) gNon-rGyal-mtshan and lVas-rgod-ldoñ-btsan were experts in archery. The former could shoot his arrow to three times the eyes' ken, and the former could cut a flying hawk into two from below.

(5) lGos-syag-chhuñ could whirl round a stag's skin filled with sand.

(6) Chagro-lbroñ-shor chased a lbroñ or Doñ (wild yak) with awful speed on a steep precipice.

(7) gNon-Khri-gyu-spyin ran his horse down a steep descent.

What these heroes achieved for the state the Gyal-rab or the Debther Ñonpo does not relate. Du-sroñ mañpo was succeeded by his son Me-Ag-tshom³⁵ born of his wife Chhim-ssáh.

This king discovered an inscription on copper of his illustrious grandfather, king Sroñ-tsan-Gampo, which contained the prophecy that in the fifth generation under the auspices of his great-grandson, bearing the surname of Dé, the Buddhist religion would greatly flourish. The king, believing himself to be the person alluded to, sent messengers to invite the two Indian Pandits, Buddha Guhya and Buddha Sánti, who were then residing near the Kailása mountain. But they declined the offer. The messengers, unsuccessful in their mission, returned to Lhasa, having committed to memory five volumes of the Maháyána Sútránta, which they subsequently reproduced in their own language. The king erected five temples in five different places,³⁶ and deposited one book in each. Besides these, he is also said to have erected other temples.

He obtained the volume of Buddhist scripture called Ser-hod-tampa from the province of Kuñ-shi in China, besides a few treatises on medicine, all of which he ordered to be translated into Tibetan. He invited several monks from Li-yul,³⁷ with a view to introduce monkhood into Tibet, but failed, as nobody would come forward to take the vows of monkhood. He found the largest turquoise then known in the world, on the top of Tag-tse.³⁸ He married Thi-tsun, the princess of the Jañ country by whom he had a son Jañtsha Lhapon. Queen Thi-tsun also bore the name of Nam-mañ. Prince Jañtsha Lha was famous for the extraordinary beauty of his person. His father sent ambassadors all over Tibet to find a match for him, but they all returned without success. At last he sent an ambassador to China, to propose a marriage between his son and the accomplished princess Kyim-shañ Kún-jú,³⁹ the daughter of the Emperor Wai-júñ. The princess hearing the account of the extraordinary beauty of the Tibetan

³⁵ Ag-tshoms means beard. hence this king was called the shaggy king.

³⁶ The following are the names of the places and of the temples erected in them.

- (1) Brag-*a*Mar-Keru.
- (2) *g*Sañ-*m*Khar-brag.
- (3) *m*Chhuns-phu-sna-ral.
- (4) Masa goñ-gi-sha-khar.
- (5) Brag-*m*grin-*b*Ssáh.

³⁷ Li-yul is identified with Nepal by the translators of Kahgyur. I have been able to ascertain that the ancient name of Nepal in Tibetan was Li-yul. Palpo is the modern name for the monastery of Palpa. Alex. Csoma identifies Li-yul with S. E. Mongolia.

³⁸ A hill a few miles north of Lhasa.

³⁹ I am not aware whether Kuñju is a Chinese word, but the Tibetans address all Chinese princesses by the title of Kuñju. Hence it appears to have the same import as *kumári* in Sanskrit or princess in English.

prince, prayed to her father to consent to the marriage, to which he at last acceded; and the princess started for Tibet. In the meantime one of the Tibetan chiefs named Thi-ssáñ, the chief of Nag, being offended with the king for not selecting his daughter for the prince's wife, treacherously murdered the prince. King Ag-tshom, therefore, at once despatched messengers to convey the melancholy news to the princess who was on her way to Tibet. The princess, deeply disappointed, did not like to return to China, but taking a fancy to see the snowy country of Tibet, and more especially the celebrated image of Sákya, continued her journey to Tibet, where she was warmly welcomed by king Ag-tshom. She brought to light the hidden image of Akshobhya which during three generations had received no offerings, having been concealed under the gate Meloñchan. Her beauty so much charmed the king that he at once proposed to marry her. The princess at first declined, but after long deliberation she yielded, and to the great wonder and joy of the people the betrothed daughter-in-law became the bride of the father. She gave birth to the famous monarch Thi-sroñ-de-tsan (Khri-Sroñ-Idcu-btsan), believed to be the incarnation of Manju Sri, the god of wisdom and learning.

CHAPTER III.

THI-SROÑ-DE-TSAN. (730—33 A. D. to 866 A. D.)⁴⁰

This monarch, the most illustrious in the Buddhist annals of Tibet, was born, according to the Chronologist Buton, in the year 730 A. D. When he was in the womb, his mother saw in a vision that a saintly prince would be born of her. She, therefore, kept aloof from all sorts of defilement and unholy things, in consequence of which she remained happy and cheerful. During this time the old queen Nam-nañ, jealous of Queen Kuñju, feigned pregnancy, by wrapping a cubit's length of cotton rag every day round her belly. Then, when the Chinese Princess' time for delivery came, Nam-nañ induced one of her midwives to give her a kind of anæsthetic liquor, through which Kuñju became insensible and soon gave birth to a son, which the wicked Nam-nañ, by bribing the princess' maid, caused to be removed to her chamber, replacing it by a female child born on the same day of low parentage. As soon as she recovered her senses, Kuñju was surprised to see a daughter instead of a son, about whom she had seen so many things in her dreams. Meanwhile, the report of Queen Nam-nañ's giving birth to a son reached the king and his ministers, who all came to witness the blessed child. Queen Kuñju, who was not talked of at all, strongly suspecting

⁴⁰ ཁྲི་སྲོང་འཇུག་པའི་རྩ་མཛུགས་ KHRI-SROÑ-IDCU-BTSAN.

her jealous partner, but, in the absence of witnesses, being unable to charge Nam-nañ with any foul motive, kept her sorrows to herself. Some of the ministers, who knew the plot of the elder queen, did not venture to speak against her. Kuñju, however, once complained to the king about the probable wickedness, but as Nam-nañ had by the agency of some drug produced milk in her paps, Kuñju did not see the possibility of establishing her accusation, but burning with a spirit of revenge tried to bring damnation on Tibet by means of her incantations, and wrote treatises construing astrology in a perverse way. In the third year of the prince's age, the king invited the maternal relations of the prince and the princess to a grand festive celebration.⁴¹ When all the nobles, chiefs and ministers of the realm had assembled, the king seated the prince and the princess on either side and taking a cupful of wine in his hand, addressed the former—"My son, take this gold cup of wine and with your tender hands offer it to him who is your maternal uncle." To the utter amazement of all present, the prince at once presented it to the Chinese prince whom he thus addressed—"I, Thi-sroñ-de-tsan am thy nephew. Nam-nañ is not my mother, though she has nursed me for a period of three years. I now meet my uncle, and my heart rejoices to behold him." These words of the infant prince struck all the courtiers and ministers with wonder. Nam-nañ's wickedness was now at last revealed, and she was overwhelmed with shame. Kuñju was transported with joy when the king presented the child to her, and now exerted herself to avert some of the evils she had brought on Tibet by her incantations; but as she did not fully succeed in correcting astrology, it is alleged by several native historians that the Tibetans cannot make correct calculations.

A. D. 743—748. At the age of sixty-three the king died leaving the throne to the young prince, now thirteen years old. Thi-sroñ applied himself to study and the critical examination of the ancient records contained in the Archives of the State. His ministers were divided into two factions, designated the "Buddhist" and the "Heretic" ministers. The first faction, or Chhoi-lon, advised the young king to encourage Buddhism, while their antagonists exhorted him to extirpate Buddhism from Tibet, which according to them had been productive of pernicious consequences. In spite of the opposition, the king, having a great inclination for Buddhism, sided with the former. The Buddhist party now, with the king's connivance, entered into a conspiracy against the life of Mashañ the prime-minister. They bribed the soothsayers and astrologers to declare that some great calamity was imminent over the king which could be only averted by two of the high officers of State entering grave-like cells and remaining there for a period of three months. The king, therefore, offered large presents to those who would undergo this

⁴¹ The Tibetans celebrate the anniversary of their birth.

self-sacrifice. The minister Mashañ volunteered to do so, and was followed by Gos the Buddhist minister. They both entered the cell, the depth of which was three times a man's length. At midnight, Gos's friends threw a rope into the grave, by means of which he climbed up and escaped. The unfortunate Mashañ was left alone there, to realize the horrors of the grave. His mortal enemies, the "Buddhist Ministers", blocked the mouth of the grave with a huge rock and buried him alive. As soon as the king came of age, he invited the Indian Sage Śānta Rakshita and Pandit Padma Sambhava from Udyayana to fill the whole country of Tibet with the blessings of the Buddhist religion. They suppressed the eight kinds of demons, nymphs, and evil spirits. With the munificent assistance of the king, Padma Sambhava founded the great monastery of Samye (*lSamyes*). They also translated many works on Sūtra (or aphorisms) and Tantra. They constructed innumerable religious symbols, such as images of Buddhas and saints and chhortens (*chaitya*), and concealed many sacred treasures for the benefit of future generations. During the reign of this king a Chinese sage named Hwashañ Mahāyāna arrived in Tibet and, by interpreting in a strange way the theories of Buddhism, converted the ignorant classes of men to his tenets. The king, harbouring great doubts as to the correctness of Hwashañ's theories, invited Pandit Kamalāśīla from India to expose his fallacies. Kamalāśīla held long controversies with Hwashañ and in the end defeated him. The king put down the Bon religion and persecuted all unbelievers in Buddhism. He enforced clerical laws and instituted codes of civil and criminal justice for the good government of his people. His statutes were written on large tablets and proclaimed all over the country. He had several wives, among whom Tshe-poñ-Ssáh was his favourite, by whom he had three sons. After a prosperous reign of 46 years, at the age of 59, he passed away from the abodes of men. He left three sons, of whom the eldest Muni-tsanpo succeeded him on the throne.

During the infancy of Muni-tsanpo the state affairs were conducted in his name by his pious ministers. He commenced his independent reign with a generous determination of raising all his subjects to the same level. He ruled that there should be no distinction between poor and rich, humble and great. He compelled the wealthy to share their riches with the indigent and helpless, and to make them their equal in all the comforts and conditions of life. Thrice he tried this experiment, but every time he found that the poor returned to their former condition; the rich becoming richer still, and the poor, by growing more indolent and wretched, turning poorer still. The Pandits and Lochava attributed this curious phenomenon to the consequence of the good and evil acts of their former births. For the enlightened and humane beginning of his reign Muni-tsanpo was greatly loved by his people.

He made large offerings to the great monastery of Samye and distributed alms to the indigent and helpless. But before a year and nine months had passed after this demonstration of devotion to the monastery, the promising king was poisoned by his mother, who perpetrated this foul act to place her youngest son on the throne. The second son Murug-tsanpo's accession to the throne being considered inauspicious by the astrologers and soothsayers, the youngest son Mutig-tsanpo, a boy eight or nine years old, received the crown. He is said to have miraculously received his lesson in sacred literature from the venerable Padma Sambhava. He ordered translations to be made from Sanskrit books of Buddhism, and built the temple of Dorje Vyiñ at Gyal-dekar-chuñ. After a long and prosperous reign, in which he strenuously exerted himself to promote the welfare and happiness of his people, he died at a good old age, leaving five sons, *viz.*, Tsañ-ma, Lha-je, Lhun-dub, Lañ-darma and Ralpachan. The first two of these seem to have reigned, if they reigned at all, for a few years, having fallen victims to the intrigues of the Buddhist ministers. The youngest Ralpachan, even from his childhood, gave excellent proofs of his intelligence and ability. His assiduity and aptitude for learning were very great. At the age of eighteen, he was raised to the throne by the Buddhist ministers of State who were very powerful, the opposition being nearly extinct through the continued and rigorous persecution of the late kings.

CHAPTER IV.

RALPACHAN. 846-60 A. D.

This celebrated sovereign was born between 846 and 860 A. D. Immediately after his accession he sent offerings to the different temples built by his ancestors. He built a new nine-storeyed temple, of which the three lower storeys were of stone, the three middle of brick, and the topmost three of wood. In the upper floors he kept Buddhist scriptures, images, and model chhorten (shrines). In the middle floors he accommodated the Pandits and translators of the holy writs, and the ground floors he reserved for the use of his court and state affairs. Although his ancestors had obtained many translations of Sanskrit works, yet not satisfied with them, he obtained fresh manuscripts from Magadha, Ujjayani, Nepál and China. Some of the ancient Sanskrit works being irregularly and inaccurately translated into the Tibetan language, which was still very imperfect, he invited the Indian professors of Sanskrit, such as Jina Mitra, Surendra Bodhi, S'ílendra Bodhi, Dána S'íla and Bodhi Mitra to conduct the great work of translation. These great scholars, with the assistance of the Tibetan professors, named Ratna Rakshita, Manjuśrí-Varma, Dharma-

Rakshita, Jina Sona, Ratnendra Sīla, Jaya-Rakshita, Kawapal-tseg (Kavāpal btseg), Chodo-gyal-tshan (Chogro rGyal-mtshan) and others, revised the anciently translated books, translated fresh manuscripts, finished those that were left unfinished, and simplified the abstruse and intricate portions of the Scriptures.

Ralpachan introduced standard weights and measures similar to those used in China, and thereby prevented fraudulent practices in commercial dealings. He enforced the canonical regulation of India for the discipline and guidance of the clergy, and commanded his lay people to follow the statutes as promulgated by his illustrious predecessors. Thinking that the propagation of religion depended much upon the predominance of the clergy, he organized many classes of priesthood. To each monk he assigned a small revenue derived from five tenants. His devotion to the priestly congregation was so great that he offered his own *Ralpa* or flowing locks to be turned into carpet-seats for the use of the Lamas. During the reign of this great monarch, there arose a dispute between Tibet and China. Ralpachan sent a powerful army to invade China. Province after province of the celestial empire fell before his victorious arms and was annexed to Tibet. When the generals and champions of the contending nations had been slain in great numbers, the Hwashā⁴² and Lopā⁴³ interceded to put a stop to further bloodshed between the two monarchs, who were related to each other by ties of blood as uncle and nephew. A treaty was agreed upon. At a place called Gūngū-Meru the boundary of the two kingdoms was fixed, and stone obelisks and pillars were erected as boundary pillars, on which the terms of treaty between the belligerents were inscribed. It was agreed that the armies of neither kingdom should ever cross the boundaries marked, nor on any pretext encroach on each others territories. All differences being settled, the nephew and the uncle became friends. They also solemnly promised not to violate the conditions of the treaty. As living testimonies to their engagements, inscriptions were written on Dorī, or high stone obelisks, erected at Lhasa, at the palace of Gya-Gyal and at Gūngū-Meru. From this time, perfect amity existed between the two nations, China and Tibet, on earth, says Debther-ñonpo, as between the sun and moon in heaven. King Ralpachan's reign was celebrated also for the good administration of justice. He punished the wicked and rewarded the good. He suppressed the powerful and protected the weak. But by attempting to enforce the strict observance of the clerical and the kingly laws, he gave umbrage to the corrupt and sinful ministers. When, unfortunately for the king, their power increased by the death of a few pious Buddhist

⁴² The Buddhist monks of the first class in China are called Hwashā.

⁴³ The Lochavas and Pandits of Tibet are by abbreviation called Lo-pan.

ministers, two ruffians who had an old grudge against the king assassinated him by twisting his face towards the back, at the instigation of his brother. This was Lañdarma, whose claims to the throne were set aside by the "pious" ministers, and who is said to have been at the bottom of this foul plot. After the assassination of Ralpachan at the age of forty eight, between 908 and 914 A. D., Lañdarma ascended the throne. The celebrated historiographer Buton assigns this event to the first part of the ninth century, in his chronology.

LAÑDARMA.

The last and perhaps the worst of the Tibetan monarchs, Lañdarma, commenced his reign by persecuting the Buddhists whom he considered his mortal enemies. He was joined in his wicked plans of persecution by his prime minister Batagna (*sBas-stag-snas*.) He reviled the first Chinese Princess Húnshih-Kúñjú⁴⁴ as an evil goblin (a yakshiní) who had brought the image of S'ákya Muni into Tibet. "It was for that inauspicious image", said he, "that the Tibetan kings were short-lived, the country infested with maladies, subjected to unusual hoar-frost and hail storms, and often visited by famines and wars". "When this image", continued he, "was being brought from the top of Rirab (Sumeru mountain), the gods were vanquished in a war with the demons. S'ákya's accession to power, first in India and afterwards in China, made the people unhappy and poor, by the demoralizing effect of his wicked teachings". To slander Buddha in such blasphemous language was his great delight, and in no discourse did he indulge himself so much as in reviling that holiest of holies. To avoid disgrace, the Pandits and Lochava fled from Tibet. Those who failed to run away were robbed and oppressed. He obliged some of the monks to be householders, others he sent to the hills to hunt wild animals for him. He destroyed most of the Buddhist works. Some he threw into water, some he burnt, and some he hid under rocks. Not satisfied with demolishing the temples and monasteries of the country, he wreaked vengeance even on the sacred shrines of Akshobhya and S'ákya. He tried to throw those two images into water, but some of his "pious" ministers having represented to him the difficulty of lifting those heavy things, he contented himself by sinking them in sand. When he was told that the image of Maitreya was very sacred, he broke into loud laughter. When he was just going to break down Lhasa (the temple of S'ákya), Rimochhe (temple of Akshobhya) and Samye, he was told that the guardian demons of those places would send plague and ruin upon him if he destroyed the temples. Being afraid of exciting the wrath of those dreaded spirits, he spared their charges, and contented himself with closing up their doors, by erecting mud

⁴⁴ Wife of King Sroa-tsan-Gampo.

walls. His ministers and flatterers, in order to please him, painted those walls with abominable pictures illustrative of the drunken and lustful moods of human depravity. When Lañdarma was thus engaged in overthrowing the sacred religion as well as its relics, the saint Lhaluñ-pal Dorje, while sitting in deep contemplation in the cavern of Yarpa-lhøri mountain, saw a vision. The goddess Paldan Lhamo descending from heaven appeared before him and exhorted him in the following terms: "Oh saint, in these days there are none so powerful as thou. Wouldst thou deliver the country from the hands of that sinful tyrant Lañdarma?" In the morning the saint inquired of his servant the condition of Tibet, upon which he was told the cruelties practised by Lañdarma. He then mounted his white charger whose body he had besmeared with charcoal, and dressing himself in a black robe with white lining, with no other weapons than an arrow and a bow in his hands, he arrived at Lhasa.⁴⁵ While the king was reading the inscription on the stone obelisk called Doriñ, the saint, as he was making his salutations, shot an arrow at the king's back, which pierced right through his body; then exclaiming, "I am the demon Yá-she, and this is the way of killing a sinful king," he sped away on his horse. As soon as the king fell, his ministers and attendants cried, "the king is dead, the king is dead," and the mob ran after the assassin, but the saint, urging his fleet companion, shot off like a meteor. In crossing a river the coal-black colour of the horse was washed away, and it became white as snow. He then turning his robe inside out so as to show the white, flew as the god Nam-théø-Karpo and escaped, leaving his pursuers far behind.

The king pulled the reeking arrow out with both his hands, and in the agonies of death, when his proud heart was subdued with anguish, exclaimed—"Why was I not killed three years back that I might not have committed so much sin and mischief, or three years hence, to enable me to root out Buddhism from the country," and died.

With Lañdarma ended the monarchy of Tibet founded by Nñh Thi tsampo, and his descendents henceforth ceased to exercise universal authority over the whole of Tibet. The sun of royalty was set, and there rose numerous petty princes to shine with faded lustre in the pale realm of snowy Tibet.

⁴⁵ The sleeves of the assassin saint were unusually broad to make room for the bow and arrow. The king stood encircled by his ministers when the saint arrived, dancing in frantic jumps. They all ran to witness his curious dance. The king called to him to come near. The saint approaching prostrated himself to salute the monarch. In the first prostration he set the arrow and bow right, in the second he fixed the arrow to the bow, and in the third killed the king with it. Hence the origin of the Lama war dance and the use of broad-sleeved robes by the Tibetan Lamas.

These six kings are called <i>Sai leg</i> mean- ing the "ex- cellent of the land."	Lu-man-mer-mo.	
	Thi-sho-leg married	(12)
	Tsan-mo-gur-man.	
	Guru-leg married	(13)
	Tsho-man-doñ-ma.	
	Doñ-shi-leg married	(14)
	Man-pu-mo.	
	Isho-leg married	(15)
	Mu-cham-mad-leg.	
	Ssa-nam-ssin-de married	(16)
These are well known by the surname of <i>Dé</i> which means the "commander" and corre- sponds to the Sanskrit word <i>Sena</i> .	Tsho-man-thi-kar.	
	De-phrul-nam-shuñ-tsan married	(17)
	Se-ñan-mañ-ma.	
	Senol-nam-de married	(18)
	Lu-mo-mer-ma.	
	Senolpo-de married	(19)
	Mo-tsho.	
	Denol-nam married	(20)
	Thi-man-je na.	
	Denol-po married	(21)
	Se-tsun-ñan-je,	
	De-gyal po married	(22)
	Man-tsun-lug-goñ.	
	De-tin-tsan married	(23)
	Ñi-tsun-mañ-ma-je.	

These are
called the
Tsan mean-
ing "king."

Gyal To-ri-loñ-tsan (24)

married

Di-tsun-chyañ-ma.

Su-thi-tsan-nam (25)

married

Man-Jab-thi-kar

Thi-dá-puñ-tsan (26)

married

Man-Jah-lu-teñ.

Thi-thog-Je-tsan (27)

married

Ru-yañ-Jah-toñ-gyal-namo-tsho.

LHA-THO-THO-RI-Ñan-tsan (441 A. D.) (28)

married

Na-so-mañ-po-Je.

Thi-ñan-ssañ-tsan (29)

married

Broñ-mo.

Bro-ñan-de-lu (30)

married

Chhin-ssah-lu-gyal.

Tag-ri-ñan-ssig (31)

married

Hol-goñ-sañ-tsun-do-kar.

NAM-RI-SROÑ-TSAN (32)

married

Tsha-poñ-ssah-Bri-thoñ-kar.

SROÑ-TSAN-GAMPO (617 A. D.) (33)

married four wives.

(1) Nepalese
princess
Pal-ssah-thi.

(2) Chinese
princess
Huñ-shiñ
Kuñ-ju.

(3) Tibetan princess
of Moñ named
Ssah-thi-cham.

Guñ-ri-guñ-tsan (34)
married
Je-thi-kar.

(4) Princess of Ru.
yoñ in Tibet.

Mañ-sroñ-man-tsan (35)
married
Do-ssah-thi-bo.

Dus-sroñ-nam-thul (36)

married

Chhim-ssah-tsan-mo.

Me-Ag-tshom (37)
married three wives.

- (1) Jám-mo-thi-tsun
Jañtsha Lha-pon.
- (2) Nam-nañ.
- (3) Kyimshañ-Kuñ-ju, daughter
of the Emperor of China.

THI-SROÑ-DE-TSAN (38)

married
Tsho-poñ-ssah.

- Muni-tsanpo
reigned for 1 year
and a few months
after which he was
poisoned by his
mother.
- Murug-tsan po
set aside.
- Mutig-tsan-po (39)
wife's name not known
(had five sons.)

Tsañ-ma. Lha-Je. Lhun-dub. Lañdarma RAI-PA-CHAN (40)

became king
between 908
and 914 A.D.,
reigned three
years, after
which he was
assassinated
by Lama
Lha-luñ-pal
dorje.

reigned up to 908
—914 A. D. till
assassinated by
Lañdarma's men.

1st wife

Thi-de Yum-ten.

2nd wife.

Nam-de-Hod-sruñ.

PART II.

TIBET IN THE MIDDLE AGES.

CHAPTER I.

A. D. 917 TO 1270.

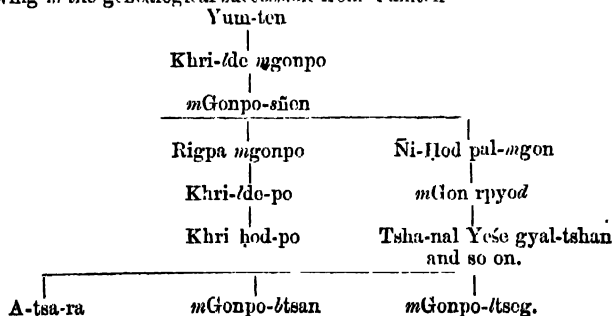
The wicked Lañdarma had two wives, the elder of whom, perceiving that her partner was in the family-way, shammed herself to be pregnant. At the time of the younger's delivery which took place at dusk, she clandestinely tried to kill, if possible, or steal away the new born child, but failed in her wicked design on account of the presence of a lamp light. The child was therefore given the name of Nam-do Hod Sruñ⁴⁶ or "one protected by light." The elder queen, to retrieve her failure, out of revenge, bought a beggar's child to whom she declared she had given birth on the previous evening. The Minister really wondered how she could have only yesterday, as she said, given birth to a child which had its teeth fully grown. But fearing to contradict the words of its mother, they gave it the name Thi-de Yumten⁴⁷ or "one upheld by his mother."

During the interregnum, the Buddhist Ministers directed the affairs of the state. They endeavoured to revive all the religious institutions that were nearly extinct. They reinstated the images in their former places and rebuilt the demolished monasteries and temples. Notwithstanding their feeble efforts to rebuild the edifice that had been ruthlessly pulled down by Lañdarma, Buddhism did not reach its former condition within seventy years from the death of Ralpachan. As soon as they came of age, the two sons of Lañdarma, quarrelled with each other for the possession of the throne. At last they divided the kingdom into two parts. Hod-sruñ took possession of Western Tibet, and Yumten⁴⁸ of the

⁴⁶ གནམ་མེ་ཤོད་སྤྱད་

⁴⁷ ཐི་ཤེ་ཡུམ་བཞུག་

⁴⁸ The following is the genealogical succession from Yumten—



Eastern Provinces. This unfortunate partition gave rise to incessant quarrels and disturbances, both the brothers constantly engaging in wars against each other.

Thus after the partition of the kingdom of Tibet⁴⁹, the descendants of Ņaḥ thi-tsanpo ceased to exercise universal sway over the country. They became weak and imbecile, in consequence of which they fell in the opinion and esteem of their subjects. Ḥodsruñ died at the age of 63 (980 A. D.) His son PalKhor-tsan⁵⁰, after reigning thirteen years, died at the age of 31 (993 A. D.). He left two sons, *viz.*, Thi Taśi Tsegpa-pal and Thi Kyi-de Ņinnagon. The latter went to Ņaḥ-ri, of which he made himself master and founded the capital Purañ and built the fortress of Ņi-Ssúñ. He left three sons of whom the eldest Pal-gyi Derigpa-gon declared himself king of Mañ-yul; the second Taśi De-gon seized Purañ; and the youngest, named De-tsug-gon, became king of the province of Shañ-shuñ (modern Gugé). Detsug-gon left two sons, *viz.*, Khor-ré and Sroñ-ñe. The elder became a monk and changed his name to Yeśé-ḥod.

Taśi tsegpa,⁵⁰ who succeeded to the throne of his father, had three sons, Pal-de, Ḥod-dé, and Kyi-de.

This point of time is marked in the Tibetan History by the revival of Buddhism. Since the suppression of that religion by Lañdarma, no Indian Pandit had visited Tibet. After a long interval the learned Nepalese interpreter, called in Tibetan Leru-tse, invited the Pandits Thala-riñwa and Śmṛiti to Tibet, but unfortunately after his death, which happened soon afterwards, his friends had to pass many years in privation as vagabonds in a foreign land. People took no heed of them. Smṛiti, in order to sustain life, betook himself to the occupation of a shepherd at Tanag. Afterwards becoming acquainted with the Tibetan language, he made his talents known. He visited Kham and conversed with the learned men of that place. He wrote a vocabulary of the Tibetan language which he called the "weapon of speech". The revival of Buddhism in Tibet dates from 1013 A. D. The royal monk Yeśé-ḥod⁵¹ invited the celebrated Indian Pandit Dharmapāla from Magadha, who arrived at his capital accompanied by three pupils, all of whom bore the surname of Pāla. With their assistance the king encouraged the teaching of religion, arts, and especially vinayá.

Lhade, the son of Khor-ré invited Pandit Subhúti Śrísánti who translated for him the whole of S'erehin.⁵² He appointed the illustrious

⁴⁹ མངའ་བདག་དཔལ་ལྷོ་འཛིན་

⁵⁰ ཁྱི་བཟ་ཤམ་བཟླམས་པ་དཔལ་

⁵¹ i. e., Khor-re, the son of King Detsuggon.

⁵² Prajñā-pāramitā.

translator Rinchen Ssañpo as his chief priest. He left three sons, *viz.*, Hod-de, Shi-va-hod, and Chyañ Chhub-hod. The last acquired great proficiency both in Buddhism and in heretical philosophies, and was very much attached to the great translator. He became an illustrious personage in Tibet. Being greatly interested in the restoration of Buddhism to its former glory, he thought it urgently necessary to invite an eminent Indian Pandit who should be profoundly versed in all the S'ástras and particularly qualified in the three branches of Buddhism, *viz.*, theory, meditation, and practice of rites and observances, besides possessing a thorough acquaintance with the five Buddhist learnings. He sent emissaries to India to see if such a man was to be found in Áryavarta. Being informed by some of his ministers of the great fame of Lord Atiśa, the king became anxious to invite him into Tibet. Accordingly he equipped an expedition under the leadership of Nagtsho Lochava. He sent large quantities of gold and other valuable presents for this celebrated Pandit, in charge of his envoys. The party safely reached their destination, the city of Vikrama S'ilá, then the head-quarter of Buddhism in Áryavarta, where they obtained an audience with the ruling king called in Tibetan Gya-Tson scñge. After prostrating themselves, they laid their master's presents before Lord Atiśa, and related to him the history of the rise, progress and downfall of Buddhism in their mother country, and its recent revival therein. Under such circumstances, they represented, the cause of Dharma could not be promoted by any other Pandit than himself. They exhorted him to accept the invitation. The Lochavas became his pupils and waited upon him as his servants. At last after a long and careful consideration Atiśa consented. Having consulted his tutelary deities, and the divine mother Tárá, and believing that if he went to Tibet, he would render valuable service for the diffusion of Buddhism, more particularly because it was predicted of him that he would be of great service to a certain great Upásaka.⁴³ Although the journey would be beset with dangers to his life, yet the aim of that life being devotion to the cause of religion and the welfare of living beings, he quitted his monastery Vikrama S'ilá, for Tibet, in the year 1042 A. D. at the age of 59. Arrived in Nāh-ri he took his residence in the great Lamasery of Tho-ding. He instructed the king in aphorisms and tantras. Then gradually he visited U and Tsañ where he turned the wheel of Dharma (preached religion). He wrote many useful S'ástras, such as Lam Don (ལམ་དོན་), "the lamp of the true way." He died at the age of 73, in 1055 A. D. During the reign of Tse-de, the son of Hod-dé, he assembled all the Lamas and monks of

⁴³ This was the celebrated Brom-tan-Gyalwai Juñne, who succeeded Atiśa in the Pontifical chair of Tibet.

U, Tsañ and Kham, and introduced, at a grand convocation, the method of calculating time by the system of cycles of 60 years, called Rab-Juñ, obtained from S'ambhala, a province in Northern India. He exhorted them to maintain the honour of Buddhism. During this period many learned translators, such as Ssañ Kaar Lochava, Rva Lochava, Nan Lochava, Lodan S'erab, &c. were engaged in translating Sanskrit works (1205 A. D.). The sage Marpa, Mila Gonpo, and the famous Pandit Sákya S'ri of Kashmir, besides many other Indian Pandits who furthered the cause of Buddhism, belong to the following century. In the reign of Tagpa-de, the ninth in descent from Tse-de,⁵⁴ was constructed an image of Maitreya Buddha, which cost him 12000 Dot-shad or a million and a half of rupees. He also prepared an image of Manju S'ri with seven "bré"⁵⁵ of gold dust. His son Asode was a greater devotee than himself. He annually sent offerings and presents to the Vajrásana at Buddha Gaya (Dorje-dan), which was continued even after his death. His grandson Ananmal prepared a complete set of the Kalgyur, written on golden tablets. Ananmal's son put the golden dome over the great temple of Buddha at Lhasa and constructed the image of the god at an immense cost. Ananmal's great-grandson was initiated into Buddhism by the Sakyapa Lamas and subsequently became king. A relation of the last king of this dynasty, named So-nam de (*bSod-nams lde*), accepted an invitation to become king, and under the title of Punya-mal held the government of Purañ.

The descendants of Palde (son of Tasi tseg pa) made themselves masters of Gûñ-thañ, Lugsyalwa, Chyipa, Lha-tse, Lañ-luñ and Tsakor, where they severally ruled as petty chiefs. The descendants of Kyi-de spread themselves over the Mu, Jañ, Tanag, Ya-ru-lag and Gyal-tso

⁵⁴ The following is the genealogical succession from Tse-de.

- | | |
|----------------------|--|
| (1) rTso-ldo. | (10) Aso-ldo. |
| (2) bBar-ldo. | (11) bJo-dar-rmal. |
| (3) bKrañis-ldo. | (12) Anan-rmal. |
| (4) Bhané. | (13) Riñu-rmal. |
| (5) Naga-déva. | (14) Sung-ha-rmal. |
| (6) bTsan-phyug. | (15) bJo-dar-rmal. |
| (7) bKrañis lDe. | (16) 'A-bJiñ-rmal. |
| (8) Grags-bTsan-ldo. | (17) Kalan-rmal. |
| (9) Grags-pa-ldo. | (18) Par-btab-rmal with whom ended the line. |

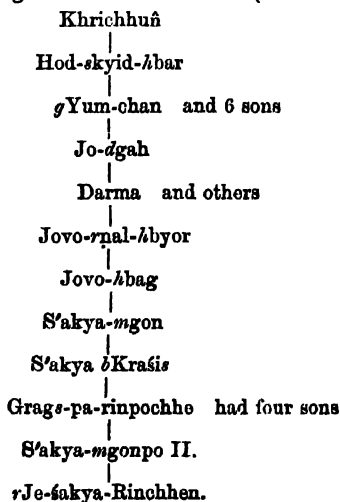
⁵⁵ A Bré is a kind of measure equal to a 10th fraction of the English bushel.

districts, where they ruled as petty princes over their respective possessions. Hod-de left four sons, *viz.*, Phab-de-se, Thi-de, Thi-chhuñ⁵⁶ and Ņag-pa. The first and fourth became masters of Tsañ-roñ, the second son took possession of Amdo and Tsoñkha, the third son Thi-chhuñ became king of U and removed the capital to Yar-lúñ. The fifth descendant of Thi-chhuñ, named Jovo Nál-Jor, patronized the Lamas Chyen-fa rinpoche and Pal Phagmo Du-pa. The seventh descendant S'akya-gon was a great patron of the celebrated Sakya Pañḍita. The ninth descendant, named Tag-pa rinpoche, accompanied the illustrious Phagpa on his visit to the Emperor of China and obtained Imperial patents. He built the palace of Tag-khai-Phodañ, and was well known for his veneration of the Buddhist congregation. He was succeeded by his son S'akya Gonpo II., who was a friend of Leg-gyal-tshan, another eminent translator of Sanskrit books. He added another monastery to the Yumbu-Lagañ palace.

Tibet as a Dependency of Mongolia and China.

All the descendants of Thi-chhuñ with few exceptions were weak sovereigns. As soon as the great and mighty warrior Chhengis Khan came, the whole of Tibet without much resistance succumbed to his power in the beginning of the 13th century. The different chieftains and petty princes became his abject vassals. Jengis Khan, variously called Chhengis Khan, Jeñgir-gyalpo or Thai-Dsuñ, was the son of a well-known Khalkha prince named Yé-phorga Bahdur, by his wife, the princess Húlan or Khulan. He was born according to Tibetan chronology in 1182 A. D. At the age of

⁵⁶ The following is a genealogical table of Thi-Chhuñ (Khri Chhuñ) :



thirty-eight he ascended the throne of his ancestors, and during a warlike career unparalleled in history, which extended over twenty-three years, he conquered almost the whole of Asia, *viz.*, India, China and Tibet, &c., He died in the 61st year of his age, in the arms of his queen, leaving many sons, among whom Gogan was the most powerful, being the ruler of the eastern portion of his dominions. Gogan's two sons Godan and Goyúgan invited Sakya Paṇḍita to their court. From that event the abbots of Sakya monastery date a new era in the politics of Tibet, as well as in the religious belief of the blood-thirsty Mongols.

CHAPTER II.

SAKYA HIERARCHY,⁵⁷ 1270—1340 A. D.

The great Khublai,⁵⁸ first Mongol Emperor of China, invited to his court Sakya Paṇḍita's nephew Phagpa Lodoi Gyaltsan, who accordingly visited China in the 19th year of his age. On the first visit, the Emperor presented him with gold patents and seals, jewellery of gold and pearls, a crown studded with precious stones, an embroidered umbrella with a gold handle, a banner of cloth of gold, besides other presents in gold and silver ingots. Phagpa was appointed the Emperor's spiritual guide to teach him the truths of Buddhism. The Emperor, in return for his services, presented him with the possession of (1) Tibet proper, comprising the thirteen districts of U' and Tsañ, (2) Kham and (3) Amdo. From this time the Sakyapa Lamas became the universal rulers of Tibet. The illustrious Phagpa now became well-known by the name of Do-gon Phagpa. After a residence of twelve years in China with the Emperor, he returned to Sakya.

During his residence at Sakya, which extended over three years, he prepared fresh copies of the Kahgyur and Tangyur, all of which by his

⁵⁷ Genealogical table of the Sakyapa regents.

(1) S'akya ḍSsañpo	(7) Chyañ-rdor	(14) Don-yod-āpal
Kun-gah-Ssañpo	(8) Añlen	(15) Yonñtsun
(2) Shañ ḍtsun	(9) Legs-pádpal	(16) Hoḍ-Ssér-Señge No. 2
(3) Ban-ākarpo	(10) Scñgédpal	(17) rGyal-va-Ssañpo
(4) Chyañ-rin ḍKyospa	(11) Hoḍ-Sserdpal	(18) Dvañ-sphyug-āpal
(5) Kun-gahan	(12) Hoḍ-Ssér-señgé	(19) ḍSoḍ-nam-āpal
(6) ḡShañ-ḍvañ	(13) Kun-rin	(20) rGyal-va-Tsañpo II
(7) Chyañ-rdor	(14) Don-yod-āpal	(21) Wañ-ñtsun.

⁵⁸ Khublai means the incarnate or one of miraculous birth.

order, were written in gold. By extorting subscription from all his subjects of the thirteen districts,⁵⁹ he erected a lofty temple at Sakya. He also constructed a gigantic gold image of Buddha, a high chhorten of solid gold, and innumerable images of other materials, and distributed alms and food to one hundred thousand monks. At the invitation of the Emperor, he re-visited China. This time, too, he won the esteem of the Emperor, who loaded him with presents, honours and titles. He was decorated with the proud title of "Tisri." On his return he brought 300 *Bré* of gold, 3000 of silver, 12,000 satin robes and many other precious articles, such as imperial bounty could shower on him. Of all the Sakyapa Lamas, this was undoubtedly the most illustrious and fortunate. Under his successors, who for many years ruled the country, owing to the imbecility of the regents, the prosperity of the people was greatly impeded, chiefs and nobles fighting and quarrelling with each other. The Sakyapa hierarchs were mostly puppets in the hands of the regents. Among these regents very few deserve notice, and they all frequently embroiled the country in feuds, and themselves in war with each other. Quarrelling, not to speak of insubordination, was the order of the day. Conspiracy, assassination and murder were rampant everywhere.

The fourth regent named Chyañ-rin-kyopa obtained a patent from the Emperor of China, soon after which he was assassinated by his servant. The administrations of two of his successors were rendered memorable by the revision of the laws of the country. Añlen, the eighth regent built the outer walls of the Sakya monastery. He also built two monasteries called Khañ-sar-liñ and Ponpoi-ri, the latter situated on a mountain of the same name. During the Sakyapa supremacy the Di-guñ (*l*Bri-guñ) monastery became very powerful, both in spiritual and temporal matters. It was patronised by the districts of Shiñ-chyar, Dvag, and Koñpo, and contained 18,000 monks. There exist in it the biographies of its abbots and many historical records connected with its former splendour and power. During the great dispute between it and its jealous sister the Sakya monastery, the regent Añlen sent all his troops to plunder it and burn it down. When the monastery was set on fire, many of the monks escaped; some, it is said,

⁵⁹ The following are the 13 districts of Tibet proper:—

1. } North and South Látó (<i>Lostó</i>).	} 6 districts of Tsañ.	1. Gyama	} 6 districts of U'.
2. }		2. Diguñ	
3. Gurmo (pronounced Kurmo)		3. Tshal-pa	
4. Chhumig		4. Thañ-po-chhe-wa	
5. Shañ		5. Phag-du	
6. Shala		6. Yuh Shañ.	

The 13th district is that of Yaru Dag containing Yu-dotsho or the Yau-do-chho between U' and Tsañ.

miraculously fled towards heaven, while those who failed to run away were scorched and burnt. Owing to this great calamity, the monastery was reduced to a deplorable condition, but after a few years it was restored to prosperity. During its quarrel with the Gelugpa sect, it was again humbled. Its present condition is the same as that of the Sakya monastery. Anle died on his return journey towards Sakya. Wañ-tsun, the last of the regents, was involved in a quarrel with his prime minister of the family of Phag-du-pa, the most powerful chief of that age. In the war, Phag-du was victorious. Thus the power of the Sakya hierarchy became extinct after 70 years' reign only.

CHAPTER III.

SECOND MONARCHY 1340—1635 A. D.

Tibet a Dependency of China.

As the power of Sakya waned, the power of her rivals Di-guñ, Phag-dub and Tshal increased. They gradually became most powerful. In the year 1302 A. D., the famous Ta-gri named Chyan-chhub-Gyaltshan, well-known by his other name of Phag-mo-dú, was born in the town of Phagmo-dú.⁶⁰ After subjugating all the thirteen districts of Tibet proper and Kham he established his dominion over Tibet. When only three years of age, he learnt to read and write. At six, he was instructed in religious books by Chho-kyi tonchan Lama. At seven, he took the vows of an Upāsaka from Lama Chyan Ńa. At the age of fourteen he visited the Sakya monastery where he obtained an interview with the grand Lama, Dag-chhen Rinpoche, which he effected by presenting a handsome pony. He stayed at Sakya for some time. Once when the grand Lama was sitting at dinner, he called Phag-mo-du to his presence and gave him a gold dish full of food, and assured him that by the grace of the gift he should one day become a great man. At the age of seventeen he passed his examination in letters. At the age of eighteen he was ap-

⁶⁰ He was the son of Rin-chhen-skyahs, the chief of Phag-mo-du and Khri-smon-bum-skyid. The following is the genealogical succession of his dynasty :

- | | |
|------------------------------------|--------------------------|
| (1) Phagmo-du (Tisri) or king Situ | (7) dVañ Grags-hbyuñ-ne |
| (2) hJam-dvyañ-gu-ñri-chhenpo | (8) Rin-chhen-gdorje Wañ |
| (3) Gragspa-rinchhen | (9) Pal-ñag-Wañ |
| (4) bSod-nams Grags-pa | (10) Ńañ-wañ-bKrañi |
| (5) Sakya-Rinchhen | (11) Ńañ-Wañ Grags-po |
| (6) Gragspa-rGyaltshan | (12) Namber-Gyalpo |
| (7) dVyañ Grags-hbyuñ-ne | (13) bSod-nams Wañ-phyug |

pointed to the command of 10,000 soldiers by patents from the Emperor of China, and entrusted with a seal for his own use; this sudden elevation of Phagmo-dú excited the jealousy and enmity of the chiefs of Di-guñ, Tshal, Yab-Saṅ and Sakya, who spared no pains in devising means to ruin him. At last they drove him to war. In the first battle he met with some reverses, but was victorious in the second. The war lasted for many years, when ultimately victory attended the arms of Phagmo-dú, who captured almost all the hostile chiefs and threw them into prison. After this great defeat, the chiefs, nobles and Lamas of U' and Tsañ, jointly petitioned the Imperial Court of Peking to degrade the upstart. They represented that Phagmo-dú treated with violence the chiefs and generals of Tibet and especially the Sakyapa authorities whom he had thrown into prison. Phagmo-dú, presenting the skin of a white lion, besides other rich and rare presents, to the famous Tho-gan-thu-mer, then Emperor of China, represented the circumstances connected with the case. Pleased with his sincere statements, the Emperor decided in his favour and furnished him with renewed patents and seals and bestowed on him, to be enjoyed as hereditary possessions, the province of U', leaving Tsañ to the Sakyapas.

After his return to Tibet, he organized a regular form of government. He reformed the legislation, and revised the ancient laws and regulations. He revised the canons and the ancient laws of kings Sroñ-tsan Gampo and Thi-sroñ, which had been discarded by the Sakyapa rulers. He built a castle on Nedoñ-tse hill and a large fortress with three gates to the ramparts. He refused admission to women to its interior. He himself practised abstinence by refraining from the use of wine and the habit of taking afternoon-meals, as prescribed in the Vinaya class of scriptures. He endeavoured to observe the ten virtues mentioned in the sacred books. By his exemplary morals and piety, and above all by his beneficial rule, he won the sincere esteem of his subjects. He founded the monastery of Tse-thaṅ, and admitted a large number of priests into it. He prepared a copy of the Kahgyur in gold characters. He built thirteen forts such as Goñkar, Bragkar, &c. During the supremacy of Phagmo-dú, the Sakyapa authorities and chiefs, on account of their imbecility and internal dissensions ceased to exercise authority over their subjects. They were also sunk in debt, and during their rule, they had debased the ancient laws of Tibet by an admixture of Chinese and Mongolian laws. It was by these injudicious proceedings that they created dissatisfaction among the people and forfeited the confidence of their subjects. Phagmo-dú having represented all these various acts of imbecility to the Court of Peking, the Emperor permitted him to annex the remaining parts of Tibet and Kham to his possessions, in order by his rule to increase the happiness and prosperity of

the people. This monarch is famous under the title of King Situ. He now became the undisputed master of the whole of Tibet. He made ten million cast images. The fourth in descent from Phagmo-dú was Sákya Rinchhen, who became a favourite minister of the Emperor Tho-gan-thu-mer by whom he was entrusted at first with guarding the palace and afterwards with the collection of revenue from one of the great provinces of China. Sákya Rinchhen, instead of showing his gratefulness, took part in a conspiracy, matured by the Chinese Prime-minister, to kill the Emperor. He sent many wagons, loaded with armed soldiers concealed under decorations of silk clothes and silver and gold. By this means many soldiers entered into the imperial palace. When the Emperor discovered the plot, he fled towards Mongolia by the back-door of the palace. The Prime-minister usurped the throne, from which date China passed into the hands of a native dynasty.

Thus the house founded by the illustrious Khublai ceased to bear sway in China. The throne passed to the traitor Kyen-Hun, whose son Yuñ Miñ was proclaimed Emperor. Miñ presented Tagpa Gyaltsan, son of Sákya Rinchhen, with gold and crystal seals, and the additional possessions of Kham and Amdo, and several suits of kingly robes. He was made the undisputed sovereign of all Tibet which now extended from Ñah-ri-kor-sun to the western boundary of Kham.

Tagpa-Gyal-tshan was succeeded by his son Vañ-juñ-ne who was recognised by the Emperor Kyen-thai Li-Wañ. He prepared a complete set of the Khagyur written on gold tablets. Tagpa-Gyal-tshan was a great friend of the great reformer Tsoñkhapa whom he assisted with great liberality and zeal. He prepared two sets of the Khagyur in gold, one in an alloy of gold and silver, and three written in ink. He also prepared 1,00,000 copies of Dháranís. For years he supported 1,00,000 monks at his own cost. He built the fortresses of Hu-yug liñ and Karjóñ. His grandson Rin-Dorje obtained the title of Wañ (king) from China. Ñañ-Wañ Tasi was a very impartial and just king. He shewed great veneration for the Daki Lama Sonam Gyatsho whom he greatly patronized. The celebrated Bhutan Dharma Rájá named Padma Karpo was also his friend. He himself was well versed in Buddhist literature, and impartially respected all classes and religions, and built chaityas in Lhasa and other places. He several times fought with his rebel minister Rin-chhen Puñpa and was every time successful. He was adorned with the title of Kwadiu-kau-srib, by the Emperor of China.

Thus during the reign of the Phagmo-du dynasty all Tibet enjoyed peace and prosperity. People became rich in money and cattle. The country enjoyed immunity from famine and plague, and was not harrassed by foreign invasion, being under the protection of China, and more parti-

cularly under the benign rule of the kings of this dynasty. Although some petty fights and quarrels with the disaffected and rapacious ministers now and then disturbed the peace of the kingdom, yet on the whole the dynasty was most beneficial to Tibet. From the time of Namber-Gyal-vañ's reign, the chiefs and nobles of U' and Tsañ constantly waged war with each other, in consequence of which the power of the king waned, to a great extent. At this critical time the king of Tsañ became very powerful and by taking advantage of the reigning king's weakness gradually became *de facto* sovereign of Tibet. He brought the whole of U' and Tsañ under his dominion. Thus when fortune was about to turn towards the proud king of Tsañ, suddenly the Mongolian warrior Guśri Khán invaded Tibet and speedily completed its conquest. Guśri Khán presented the fifth Dalai Lama with the monarchy of all Tibet. From that event, in the year 1645 A. D., dates the Dalai Lama's supremacy.

CHAPTER IV.

MINISTERS AND POWERFUL NOBLES OF TIBET.

I. The Family of Rinchen-puñ-pa.

Nah-Thi-tsanpo, the first king of Tibet, chose for his minister one of the most powerful and intelligent Tibetan chiefs, whom, owing to his imperfect knowledge of the Tibetan language, he used to call Khyè-hu (or the little man). He was afterwards called by his proper name of Gerpel-leg-po. He had three sons, *viz.*, Chhyi Ger, Nañ-Ger and Dub-thob-Ger. The twenty-seventh descendant of Nañ-Ger, named Ralpa Ssín, obtained seven boat-loads of turquoises from Gruguipul.

The famous Thon-mi Sambhoṭa was a descendant of Chhyi-Ger. Among the descendants of Dub-thob-Ger, many illustrious ministers were born: Gar, the celebrated prime-minister of king Sroñ-tsan-Gampo, Go, Shañ-shi, Da gyal-tshan, &c.; the ministers of Thi-sroñ-deu-tsan were among them. The great saint Vairo-tsana was descended from Dub-thob-Ger. Mashañ and other enemies of Buddhism also belonged to his family. One of the descendants of Dub-thob-Ger became prime-minister of King Tagpa-Gyaltshan of the dynasty of Phagmodu. He obtained the Jónponship of Rinchen Puñ, the generalship of Chlumig, and afterwards became the highest official under the Sakyapa authorities. His son and grandson Norpu Ssáñpo succeeded him in his dignities. The latter became the commander of the army and headed many of the chieftains of Tibet. He founded the monastery of Roñ-Tsham-chhen and became the chief patron of the first Dalai Lama Gedun Dub. He left five sons, the eldest of whom became the prime-minister of Wañ Tagpo juñné, and succeeded to his father's dignities, favoured the Sakyapa

school, and founded the monastery of Thub-tan Nam-gyal at Tanag. He was succeeded by his son Don-*yo-ge*.

Don-*yo* being entrusted with the command of the army recovered the towns of Bragkar, Chhu-shul and Lhunpo-tse from the hands of Nelva. He favoured the Karnapa sect of the ancient school of Buddhists, in furtherance of whose cause he founded the Yañpa Chan monastery. He sent an army to subjugate Kyid-shod, but it was repulsed by the Gah-dan forces which came to assist the aggrieved party. His son Ñag-Wañ namgyal became the prime-minister to King Pal Ñag Wañpo and was a great warrior and scholar. He incurred the displeasure of the king by having tried to employ the army under his command to take possession of E' Ñal, in consequence of which he lost his possessions in U'. He, however, retrieved this loss by fresh acquisitions in another quarter, for Sengetse, Lato, Lho and other places, came under him. He patronized the monastic institutions of Tsañ. He left three sons, of whom the second, called Ton Dub Dorje, succeeded him in his dignities and possessions. This young chief was also a valiant warrior. He obtained possession of Lhun Dub-tse-Jón and founded the monastery of Ssáñ-rabliñ. He became acquainted with the dogma of the Dsógchhenpa class of the Ñiñma school. The youngest Ñag-Wañ Jig-Grag also became a very learned man and wrote many works such as a history of Tartar kings, a Romance of S'ambhala, and many other poetical narrations. His son Da-Ssañpo inherited his property and dignities. In his old age, many of his subject chiefs having deserted him, he became poor.

II. The House of Shon-nu Ssáñpo, the Tartar (Hor).

This family traces its origin to the royal races of the city of Sahore in ancient India. Dharmásoka, king of Magadha, who was born of the family of king Daśaratha, built one million chhortens, and performed other religious acts showing his great piety. His son Jaya also received many miraculous blessings from heaven by means of his prayers. One of his illustrious descendants, named Indrabhuti, king of Sahore, became well versed in the Tantras and ultimately attained sainthood.

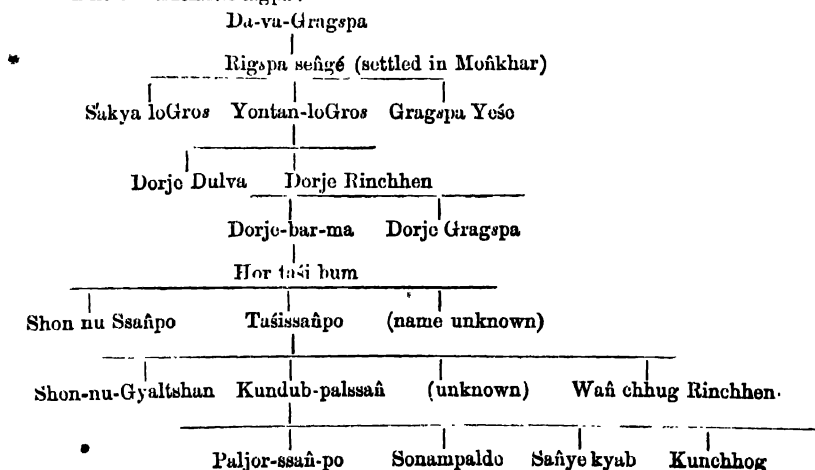
His grandsons Dharma-rāja, Sánta Rakshita, and granddaughter Mandárává, were famous for their devotion to Buddhism. The second, Sánta Rakshita, being profoundly read in five classes of Buddhist scriptures, went over to the snowy country of Tibet to lay the foundation of Buddhism. Then Mandárává became a saintly fairy. She was the reputed wife of Padma Sambhava. Dharmarāja succeeded to the throne of his father. He left three sons, Dharmapála, S'ákya-deva and Mahádeva. During this period, king Thi-sroñ-deu-tsan, in order to found the monastery of Samye invited Padma-Sambhava from India. Arrived in Tibet the

illustrious sage invoked the Nágas to guard the institution against attacks from malignant spirits and malicious folk, but they having expressed their inability to undertake such a serious charge, Padma Sambhava, sitting in Yoga, invoked the prince of genii well-known by the name of Pehar. But as the genius was reluctant to go over to Tibet having for master Dharmapála,⁶¹ the king of Sahore, king Thi-sroñ Deu-tsan sent an Ambassador with such presents as a turquoise image of Buddha, musk and crystal, to invite them both to Tibet. After meeting with great hardships the party arrived in India. King Darnapála accepted the Tibetan king's proposal. King Thi-sroñ-dén-tsan appointed him as his chief spiritual guide and minister, and gave him large jagirs. The demon Pehar Gyalpo⁶² was bound, by a solemn oath to protect the Buddhism of Tibet. He was so vigilant and quick a guard that he could detect and pursue a thief who, after stealing anything as small as a needle from Samye, could fly eighteen times faster than an eagle. Dharmapála married the fairy Phoyouñ-ssah by whom he got two sons Pal Dorje and Rinchen Dorje. The younger, turning a hermit, visited India and died in the city of Sítá miraculously. The elder married a Tibetan lady by whom he got three sons Rinchen-tagpa, Dorje-tagpa, and Chho-kyi-tagpa. The youngest became a monk. The eldest Rinchen tagpa had a son of the name of Da-va-tagpa.⁶³

⁶¹ This appears to be a legendary account of the famous Dharmapála of Magadha.

⁶² According to the majority of Tibetan Historians, Pehar was invited from the Western country of Ugyen, which is identified with Gazni and Balk.

⁶³ Line of Rinchen tagpa :—



Da-va-tagpa's eldest son Rigpa señge, settled in the Moñkhar country, and inherited his possessions and office. He became minister to the reigning king. Shon-nu-ssañpo and Taši-ssañpo were ministers of king Situ, the founder of the Phagmodu dynasty of kings. The eldest was the general who defeated the Sakyapa armies at the battle of Yarlûn; in consequence of which Sakya, Tsañ, Jañ and Lhomañ came under his master's possession. Paljor Ssañpo the last mentioned in the table, became Joñpon of the town of Ñañ-SamDub-tse. He signalized himself in a war, and was a great friend of the first Dalai Lama Gedun-dub.

Rinchhen-tagpa, probably a son of Paljor Ssañpo, became chamberlain to king Wañtag-gyaltshan, a descendant of king Situ. His younger brother became versed in Tantrik ceremonies and is said to have possessed great influence over clouds and winds. He rendered immense good to the country by bringing down rain in times of drought. Rinchhen-tagpa's son, Hor Taši Dorje, became minister of king Wañ-tagpa Juñne and founded the monastery of Rivo-de-chhen. He left two sons Tse-wañ-namgyal and Rinchhen Gyaltshan. The first was a professor of Buddhism. The youngest, being a wise and learned man, was elected chief minister of state. He was appointed Secretary to the Commission which sat to settle the great dispute which took place between U and Tsañ. At its conclusion, when matters were brought to a happy close, he was rewarded with a large jagir consisting of three towns. His eldest son was appointed General of the king's army and the second son was appointed Prime-minister. The eldest left two sons, *viz.*, Sonam-Targe and Tondub Dorje. The younger turned an ascetic and the elder became the minister who patronized the Dalai Lama Sonam Gyatsho. His son Sonam-targe obtained the town of Lha-tse Joñ as jagir from the king.

III. rGyal-khar rtse-pa.

This is an ancient family of Kham descended from Da-gyo-loñ, a famous warrior mentioned in the great Tibetan epic called the Gyaldruñ, who tamed the savage men of Kham. His dress consisted of 100 tiger skins. He married the daughter of Qesar, the hero of that great epic. One of his descendants was Nam-kha-chyañ-chhub,⁶¹ whose son Yon-

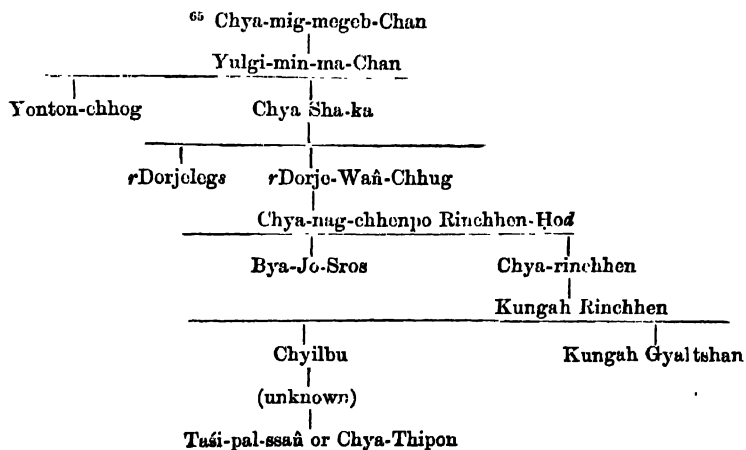
Namkha-lhun grub
|
Yon-dag-Suñ-ñig
|
rGyal-tsan
|
aPal-dan /Ssañpo
|

Rabtan-kun-/Ssañ
|
òKraśi /phags
|
Don-Grub /phags

dag-suñ-nig was a powerful Tantrik. His son Gyal-tsan knew several languages and was a Buddhist scholar. He wrote several works and favoured the Karmapa sect of the old school. He built the monastery of Tshurphu called Chyañ-chhub-chhenpo. Paldan Ssáñpo, his son, was an official of high rank under the Sakyapa hierarchy. He was sent as ambassador to the Tartar Emperor of China, and returned successful from his mission. He erected the forts of Tse-chhen, Phag-ri, Gyal-tse, Náve and Khyuñtse, and a monastery at Tse-chhen. Kubtan Kun-Ssañ, his son, became minister to king Tagpa-gyal-tshan. He defeated the troops of Namkha-gyalpo, the chief of Rinchen Puñpa, and made them prisoners of war. He patronized Panchhen Rinpoche, Kha Dub Ge-leg-pal Ssáñ. He founded the famous monastic institution of Gyal-tse called Palkhorehlo-de with eighteen schools in it, and erected the picturesque chhorten of Gyal-tse called Chhorten Tasi-Gonañ, which has 108 doors and is several stories high. He was famous for his devotion to religion and was the most celebrated king of Gyal-tse.

IV. Chya-Thi-pon. (The bird-general.)

Once on a time in the lower Yar-luñ District north of Lhasa, a very handsome maiden was met by a splendid looking bird, who captivated by her personal charms had descended from his aerial residence. After some time spent in happiness with the bird she gave birth to a son named Chya-mig⁶⁵ who became a great supporter of Buddhism. Yon-ton chhog, grandson of Chyanig, was a learned man and well-known by the name of Yar-khanpo. Dorje-wañ-chhug his nephew went towards Nán and founded the town of Gyam-tsho. Dorje's son Lama Chya-nag was a



pupil of Sákya S'ri Paṇḍita of Kashmír, who became a renowned teacher and founded the monastery of Yañ-tse. His second son Chya-Rinchhen, after repelling many Tartar armies, became the chief of Eñyal. His son Kungah-Rinchhen became a minister of Kungah-Ssáñpo the regent under the Sakyapa Lamas. He was a pupil of Dogon Phagpa. He left four sons of whom the first Kungah-Gyaltshan was appointed minister to the Sakyapa regent Hod-ssér-scñgé. The second son Chyilbu being a nephew of the chief of Diguñ, was appointed Joñpon of Chyar Dag. His son became abbot of Ssáñmochhe, whose grandson Taśi-pal Ssáñ became the general of king Tagpo Gyaltshan, under the title of Chya Thipon. Taśi's son Gyal-wa Taśi became secretary to the king and inherited his father's titles and dignities. Gyal-wa's son Taśi Dargye was appointed General of Lhogyud-Luñ by the king. He prepared a set of the Kabgyur in gold characters, constructed many images and chhortens and did many pious acts. From him the title of Chya-Thipon obtained its celebrity. The last men of this dynasty served as deputies to the kings of Phagmo dú dynasty.

V. Secretary Tag-pa-Ssáñpo.

Ñañ-Tagpa Ssañpo of a family descended from Vañ phugñan, the secretary to king Thi-sroñ deu-stan, was born in the Eastern district of Tsen-thañ. He became one of the ministers of king Situ. His son S'erab Taśi served as an envoy to the Tartar Emperors of China, from the Sakyapa and Tshalpa Lamas. He was a devoted minister, who in the discharge of his duties did not fear to risk his life. Honesty and self-denial were his prominent virtues. He conducted his affairs personally before the celebrated Thugañ-themur. He returned to his master's presence, having successfully accomplished his mission, with the imperial patent in his hand issued in favour of his master king Situ. Pleased with his conduct, the king presented him with the town and fort of Tag-kar. His son Rinchhen Pal Ssáñ succeeded him as Joñpon and was a sincere patron of the great reformer Tsoñkhapa. He helped him greatly in the building and establishment of the Gah-dan monastery.

VI. Nelva.

Rinchhen Ssáñpo was a minister of king Situ. In the Sakya war, he made the regent and other chiefs of the Sakya Hierarchy captives and kept them in prison for thirteen days. He punished 500 rebels, for waging war against king Situ. His son Pon-tagpa became commander of the army, and defeated his enemies in a great battle. He was famous for his liberality to the poor, and for his devotion to the clergy. His son Nam-khah Paljor, became Joñpon and favoured the Dapuñ monastery.

VII. Magpon Sonam Gyalpo.

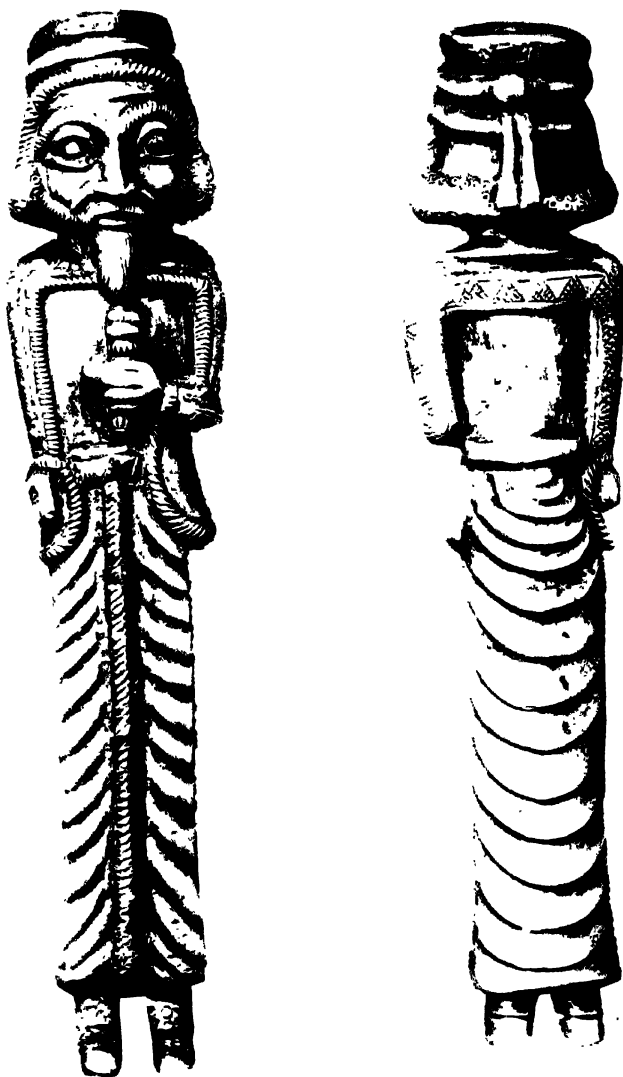
This family is descended from Gar the celebrated minister Sroñ-tshan Gampo. They were the chiefs of Tshal, but being defeated in war by king Situ, they became his vassals. One of the illustrious members of this family was superintendent of the Gah-dan monastery. His son Sonam Gyalpo was a celebrated general who being victorious in war with Rinchen Puñpa in the battles of Lho-bragpa, Dvagpo and Koñpo, became well-known by the title Magpon or general. He subsequently became magistrate of Lhasa. He built a gold dome over the great temple of Lhasa. His descendants have all along served their country well.

VIII. Deva-Holkhapa.

This family is of modern origin. The founder of it Tasi Gyaltsan was chief secretary to king Tagpa-Gyaltshan. He was appointed a Joñpon. His son Chho-Je-Ssün founded the monastery of Nima lin and endowed it with grants of land and furnished it with the Kalgyur and the Tangyur. In his old age he led the life of an austere monk. His two sons Nor-Ssünpo and Gyam-tsho-pa became ministers and generals to the king's army. The son of the elder brother was the well-known Khadub Nor Ssün who was profoundly versed in Sūtras and Tantras. He wrote many works, such as *Thimed Hodchhen*, &c. and was appointed tutor to the Dalai Lama Gedun-Gyamtscho.

(To be continued.)

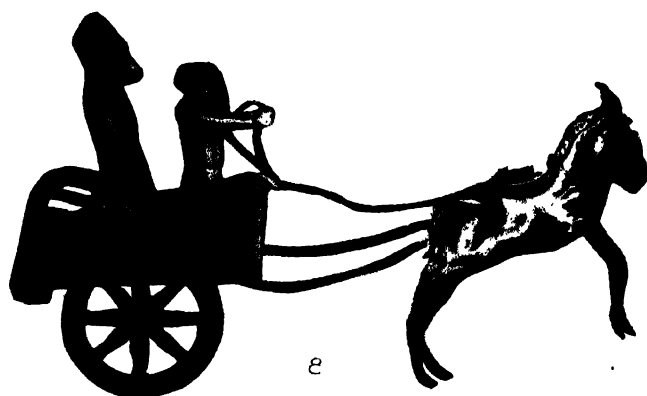
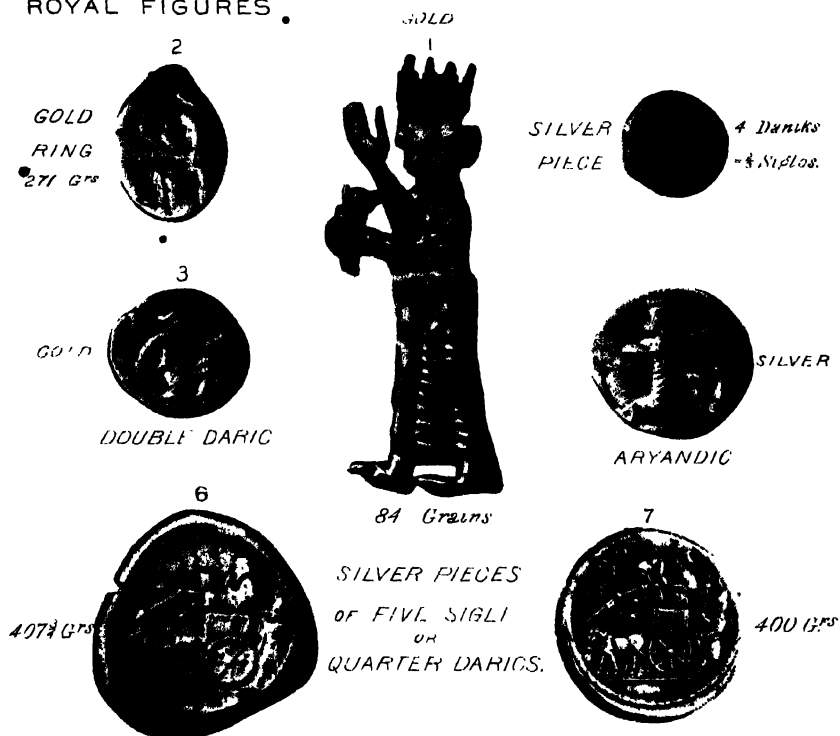
ROYAL STATUETTE



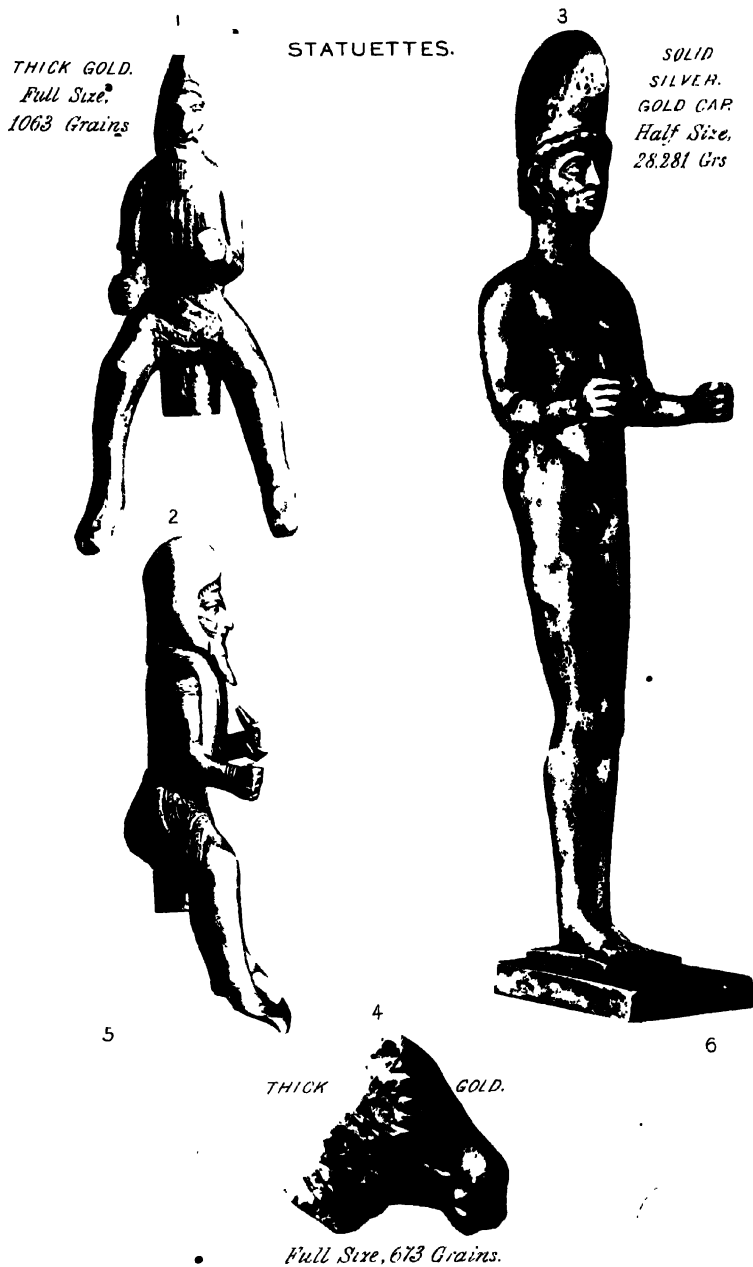
SOLID SILVER
Full size, 5794 Grains.

RELICS FROM ANCIENT PERSIA.

ROYAL FIGURES.



2 Wheels and 3 Horses lost.
Chariot 368 Grains, 1 Horse 90 Grains.



MAGUS WITH BARSOM WAND.



GOLD PLATE - 624 Grains.

RELICS FROM ANCIENT PERSIA.

ANIMALS,
ALL GOLD.

EAGLE
13 Grs.



4



1

PIGION.
24 Grs.



3



5

RING 60 Grs.

MAN & LION. 26 Grs.

WINGED BULL, Full size, 134 Grs.



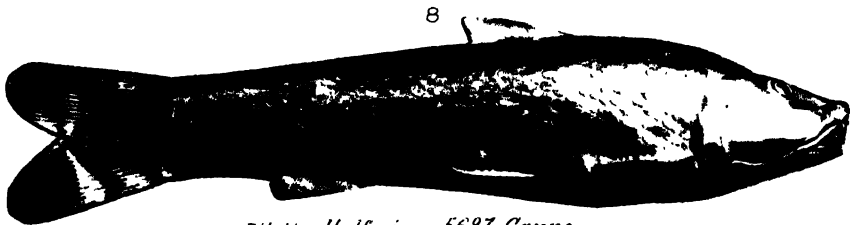
6

STAG-385 Grs.



7

SHEEP-924 Grs.



8

FISH--Half size-5687 Grains.

ORNAMENTS
ALL GOLD.

EAR-RING.



48 Grs

FINGER
RING.

176 Grs

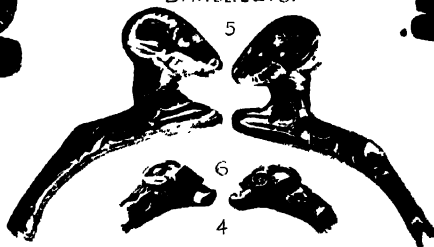


FINGER
RING.

77 Grs

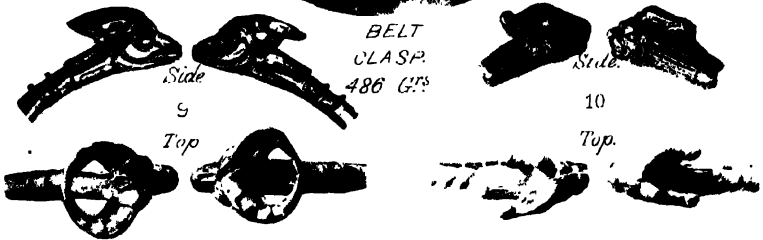


BRACELETS.



BELT
CLASP.

486 Grs



Side
Top

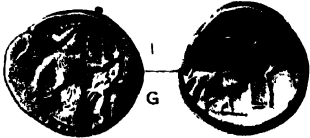
Side
Top

TORQUES

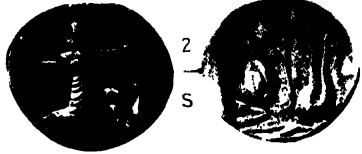


PERSIAN COINS.

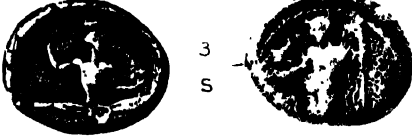
DOUBLE DARIC



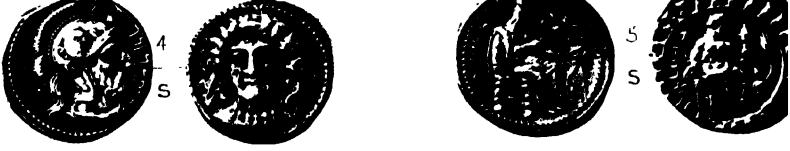
AYRHANDIC.



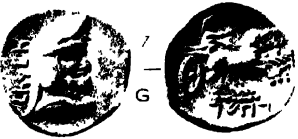
TIRIBAZUS



TIRIDAMES



GOLD



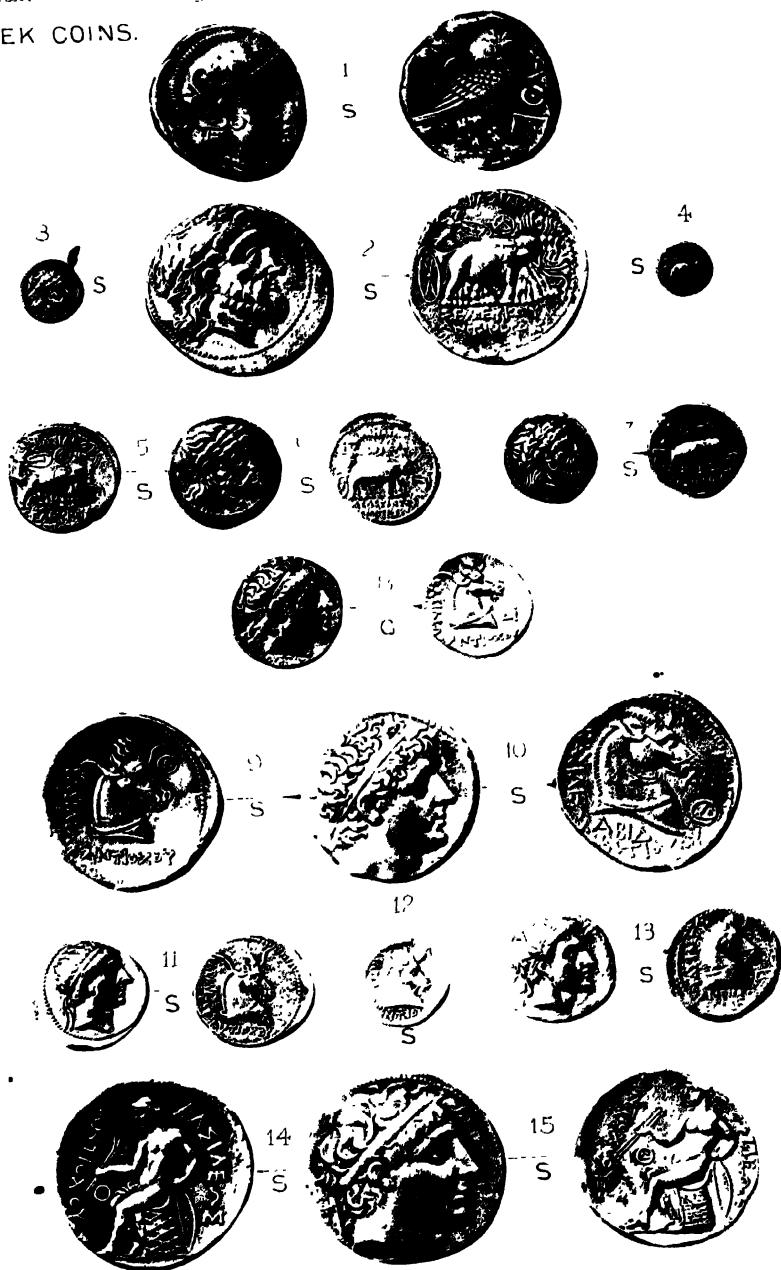
9
G



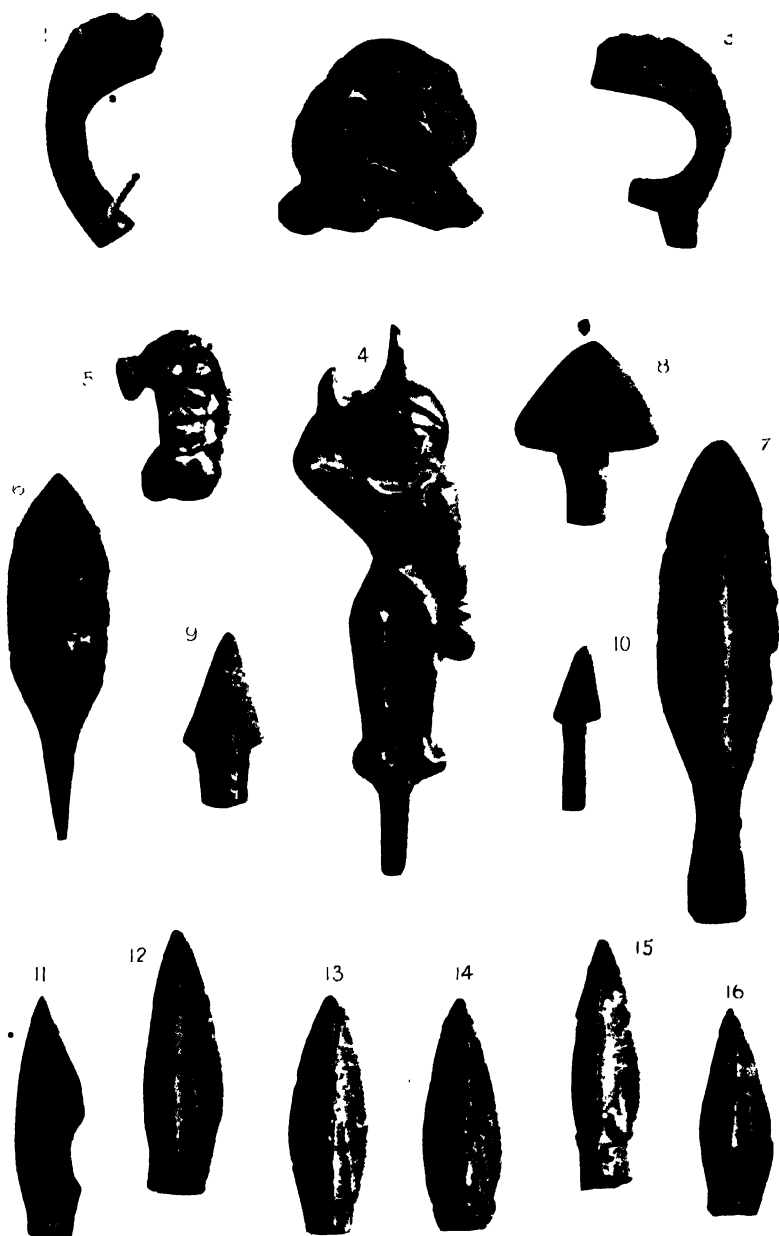
10
S



GREEK COINS.



BRONZES.



RELICS FROM ANCIENT PERSIA.

